

PUBLIC HEALTH REPORTS

VOL. XXVIII.

FEBRUARY 7, 1913.

No. 6.

COUNTRY SCHOOLS AND RURAL SANITATION.

SIX SAMPLE PUBLIC SCHOOLS IN ONE COUNTY. DOES THIS COUNTY NEED MEDICAL INSPECTION IN ITS SCHOOLS? THE COUNTRY SCHOOL TEACHER.

By CH. WARDELL STILES, Professor of Zoology, Hygienic Laboratory, United States Public Health Service.

The town of A——, county of Z——, has about 1,000 inhabitants. It boasts of an excellent brick school building with 9 teachers. There are two privies back of the school and within short fly-flying distance to several houses. Neither privy is sanitary and both have been in filthy condition the several times I have seen them. The food of the near-by families is supplied, by flies, with fecal material from these two privies. Consider the possible results of the presence of a typhoid carrier among the pupils.

The settlement of B—— is only a few miles distant from A——. There is a two-room school there which is in good condition and well painted. Two privies are present, but both are so filthy that they would naturally prejudice the children against privies in general. There is a driven well, with pump, in front of the school; the water has hollowed out the ground and forms a muddy puddle in which hogs wallow and children wade—for instance, after visiting the privies; the washer of the pump is so poor that it is often necessary to pour in water in order to start the flow. For this purpose water is dipped from the muddy puddle in which the children have been wading and the hogs wallowing. This pump furnishes the drinking water to about 60 children and 2 teachers.

A small village, C——, is located 2 miles farther on with about 150 inhabitants. (No person in town, including the mayor, could give me an estimate of the number of inhabitants.) Upon inquiring here for a privy, one of my assistants was informed that there was none in town for men except [a miserable] one near the church. The school, however, has two privies. Both of these are within short fly-flying distance to two houses which take boarders, including traveling transients.

About 3 to 4 miles farther on is a rural school, D——, with about 30 pupils. There is no privy present, but the boys go down the road in one direction, the girls up the road in another.

About 2 miles farther along the railroad is the town of E——, with about 600 inhabitants. There is a school with 1 male and 3 female teachers and about 200 enrolled children. When I first visited this school (the week before it opened for its fall term) there was no privy either for the boys or the girls. The boys went down one fork of the road, the girls the other. The school building was open and the passing public was using the upper room—intended for the higher classes—as a public privy. Several women in town informed me that they had repeatedly urged that privies be provided for the 200 boys and girls at this school. Recently the school has been provided with two privies.

About 2 miles farther is another school, F——, with about 30 pupils and 1 young woman teacher. The pupils have an abundance of hookworm disease, but no school privy.

The foregoing observations were made since August 15, 1912. They are published herewith without comment, except for the remark that the county in question is by no means exceptional. The schools represent American rural education—namely, teaching the American rural children how to live.

The country school teacher.—If a county superintendent of education gives an address before a State convention he does not seem to feel that he has done his full duty (judging from a number of meetings that it has been my privilege to attend within the last few years) unless he says something about the inefficiencies of the country school teachers, the few years during which they remain in the work, and the fact that many of them teach simply in order to earn money for their wedding trousseau.

While I would not for a moment presume to be capable of debating with the gentlemen in question, it is difficult to escape the impression that theirs is not the only point of view in the premises. Many years of field work in the rural districts have given me an opportunity to see a great many rural schools and their teachers, and as a practical sanitarian I take the liberty of presenting for consideration a side of the problem which I have not yet heard county superintendents emphasize in their convention addresses.

First of all, the point so often made that these young women teach but a few years and then marry might well be interpreted as meaning that they are of such a high standard that they are in great demand as wives—an interpretation which should be heartily indorsed.

Certain it is that the average young woman has few inducements offered to her to remain a teacher in the many country schools I have seen. As a rule, she leaves a home which is superior to the homes of the parents of her pupils in which she is forced to board if she lives in the community where she teaches. She is paid a miserable salary as reward for exposing herself five days a week to indecent and

insanitary conditions surrounding the school which jeopardize and occasionally end either her health or her life. She is blamed by her patrons for not giving a better education than she succeeds in giving to unhealthy children who on an average are not physically or mentally capable of digesting the education she does give to them. She has little or no sympathy from her school board in regard to the difficulties that she faces. If she suggests improvements in the sanitary surroundings, her suggestions usually fall upon deaf ears. She is superior in education, refinement, culture, and in nearly every other respect, to the majority of parents in the community in which she teaches. She lives a life of self-sacrifice, too often combined with indigestion and pimples, because of the class of food she is forced to eat. If she sends home from school a pupil who has the itch or in whom she suspects some contagious disease, she is blamed for her officiousness; if she contracts the disease herself, she furnishes a substitute at her own expense.¹

But she is the greatest civilizing influence to-day in our rural districts and is deserving of much more sympathy and support and of much less criticism than she is receiving.

Without denying that a more pedagogically trained class of teachers might be obtained if they were paid better salaries, I venture to suggest to their critics that they will probably be able to retain their young women a year or two longer if they improve the present indecent and insanitary conditions under which these young women have to work to a point where the girls can teach without endangering their health and lives; and these teachers will certainly have better success in their pedagogic efforts if the sanitary conditions surrounding the schools are improved to a point where the country school will not form—what it is to-day—the great disease-spreading center for rural and semirural communities.

In conclusion, I can not refrain from mentioning what may be admitted to be an extreme and somewhat exceptional case: A young woman from a town contracted to teach in a rather remote country school. She was advised to engage board with the family of the chairman of the local school board and did so before leaving home. Upon arriving at her destination she was shown into the one-room house, containing five beds, and was asked which bed she preferred to occupy.

All honor to our country school-teachers, who are to-day the greatest factors for good in our rural districts.

¹ For instance, two of the three young women teaching in the rural school where I am studying the children, the day this short article is written, have just contracted itch from their pupils and have the honor of paying a substitute. There is no medical inspection of the children, and the teacher was blamed for sending home a boy infected with scabies, but sentiment would be distinctly against the teachers if they themselves were known to attend school when they had this infection.

HOOKWORM DISEASE IN SOUTHERN CHINA.

By B. W. BROWN, SURGEON, United States Public Health Service.

In view of the action of the United States immigration authorities in requiring a rigid examination for hookworm infection of all aliens arriving in the United States, the question of the distribution of this disease in the Orient becomes of interest and importance to the public health.

It seems to be the general opinion among consular physicians and medical missionaries in this part of China that hookworm infection is prevalent in southern China, especially among the agricultural class. When it is taken into account that all crops in China are fertilized almost entirely with human excreta, that farmers work barefooted in this mixture, and that Chinamen drink freely of unfiltered water and eat uncooked vegetables, it is not surprising that they should become infected with intestinal parasites.

Dr. Bell, who has been connected with the Government Civil Hospital at Hongkong for a number of years, reports 7.5 per cent infected out of 253 Chinese examined, and 10.5 per cent infected out of 172 Hindus, and negative results in 159 examinations of Europeans.

The annual report of the colony of Hongkong for 1909 does not mention the disease. Dr. Francis Clark, the medical officer of health for Hongkong, states that in his opinion the practical immunity of the colony is due to the fact that all human excreta, instead of being used in the colony, is collected daily and shipped to Canton.

The South China Medical College at Canton reports that the neighborhood of Canton is infected, principally in the agricultural districts, but that no scientific statistics are available. Dr. Whyte, of the English Presbyterian Mission at Swatow, has done some scientific work on this subject, and he reports that the whole of his district is infected, the degree of infection being 74.5 per cent in the case of farmers and 54 per cent of the general population. These conclusions were based on the examination of 257 cases, too small a number from which to draw definite conclusions but indicating general infection of the country surrounding Swatow.

The most conclusive evidence of the infection of southern China is shown in the work of Drs. Grone, Aubrey, and Lindsay Wood, who, for the past three months, have been conducting the examinations of emigrants leaving Hongkong for the United States. They have examined to December 20, 1912, 556 persons for *ancylostomiasis* and have found 65 per cent infected.

These emigrants come from Canton and vicinity and the towns and districts near Hongkong. The town and district of Sun Ning, which is not very far from Hongkong, furnished 46 infected cases out of 102 examined. The statement of character of occupations of

those examined is not reliable, as the Chinese emigrant prefers to pass as a merchant or student rather than a laborer; but Dr. Aubrey stated that as a result of careful questioning he believed the large majority of those examined by him and found infected with hookworm were city born and belonged to the student class. It is interesting to note the number of cases found infected with other intestinal parasites. Drs. Grone, Aubrey, and Lindsay Wood report 368 cases of *Ascaris lumbricoides* (eel worm or stomach worm), 320 cases of *Trichocephalus dispar* (whip worm), and an occasional infection with *Clonorchis sinensis* (Chinese liver fluke), *Strongyloides stercoralis* (Cochin China worm), *Fasciolopsis buskii* (Busk's fluke), and *Oxyuris vermicularis* (pinworm).

The steamship companies are having all Chinese steerage passengers bound for the United States examined and are rejecting all found infected. Most of the infected ones are treated by the Hongkong firm above mentioned, and after two examinations, if no eggs are found, they are certified for shipment. The following memorandum of method of examination and treatment was kindly given me by Dr. Aubrey, and I quote in full:

METHOD OF EXAMINATION FOR HOOKWORM OVA.

1. About 1 ounce of feces is taken and an emulsion made.
2. Emulsion is strained through fine mosquito netting into a test tube.
3. The test tube is allowed to stand till a sediment about an inch in height is formed at the bottom. (This sediment contains the whole of the egg content, equally distributed throughout it.)
4. The supernatant fluid is poured off and the sediment centrifugalized.
5. The supernatant fluid is again poured off and the sediment thoroughly mixed with half a test tube of water.
6. This test tube is allowed to sediment. (In this watery medium the eggs fall first to the bottom.)
7. As soon as the sediment appears on the bottom of the test tube a long narrow pipetteful is taken up and suspended vertically.
8. After a few minutes the eggs contained in the pipette fall to the bottom; a drop from the bottom is then examined.

This method gives a sediment which consists almost entirely of eggs and contains scarcely any fecal debris, and the whole egg content of the original ounce of material can be looked through on three or four slides.

TREATMENT.

Patients are starved throughout the treatment, only tea and Chinese soup being allowed. Drugs used:

Oil of eucalyptus, 30 minims.

Chloroform, 40 minims (increased later to 50 minims).

Castor oil, 10 drams.

The above is given in two doses with an hour's interval, or in 2-dram doses every 20 minutes.

Thymol, 15 to 120 grains a day, is given in a single dose or in doses repeated at various intervals.

The smaller doses of thymol were generally given on two consecutive days, the larger ones on one day only. A preliminary purge is given on the preceding day. The oil mixture has generally been tried first and subsequent treatments have alternated between oil and thymol.

The statement here given contains all the strictly scientific data to be obtained on this subject. While the number of cases is small the territory covered is of considerable extent, and the conditions of life and customs prevailing being the same throughout southern China it is highly probable that if the inhabitants of Swatow, Canton, Hong-kong, and the vicinity be infected with hookworm the infection is general in southern China.

ANTIMENINGITIS VACCINATION.

A note by WADE H. FROST, Passed Assistant Surgeon, United States Public Health Service.

Inoculation with killed cultures of the meningococcus has recently been advocated as a prophylactic for cerebrospinal meningitis, especially by Sophian.¹ He has used for this purpose cultures grown in glucose agar, killed by heating to 50° C. for one hour. He advocates three injections of 500 million, 1,000 million, and 1,000 million, respectively, at intervals of seven days.

As to the efficacy of this vaccination, Sophian and Black (loc. cit.) have shown by agglutination and complement-fixation tests that in man the vaccination causes the development of specific antibodies similar to those developed in the course of an attack of cerebrospinal meningitis, and presumably indicating a certain degree of immunity. They state that several hundred persons were vaccinated in Kansas City during the epidemic there in 1911, none of whom subsequently developed the disease. In the absence of comparative statistics this statement alone does not justify any conclusion as to the prophylactic value of the procedure. They also state that about 100 persons were vaccinated in Dallas, Tex., during an epidemic of meningitis in 1911. Two of these, nurses, each of whom had received two inoculations, developed cerebrospinal meningitis some weeks later. Both recovered.

On the whole their statements furnish no evidence of the prophylactic value of this vaccination, while they do indicate, by the instances cited above, that it does not afford absolute protection against infection.

At present an opinion as to the value of this vaccination can be based only on indirect evidence, viz, the development of antibodies in the blood of vaccinated persons, and by analogy, the efficacy of similar inoculations in the prevention of typhoid fever and bubonic plague.

¹ Sophian, A., and Black, J.: Prophylactic vaccination against meningitis, *Journal American Medical Association*, 1912, vol. 59, p. 527.

Statistical evidence of the value of any prophylactic against cerebrospinal meningitis is extremely difficult to obtain, because of the epidemiological peculiarities of this disease. It does not show a constant tendency to spread. In one community it may become epidemic, while when introduced into another contiguous community at the same time under circumstances to all appearances equally favorable for the development of an epidemic, the infection may die out after causing only a few cases. Again, even in epidemics, the proportion of the population attacked is relatively small (from 0.1 to 1 per cent); and in this, as in other respects, epidemics in different localities vary widely without discoverable cause. Since it is impossible, in any given community, to foretell the extent to which cerebrospinal meningitis will spread when introduced, it is equally impossible to estimate the efficacy of such preventive measures as may have been carried out. Only very extensive and very careful statistics could prove the prophylactic value of vaccination or any other measure of prevention.

The objections which may be brought forward against antimeningitis vaccination are the danger of using an incompletely sterilized culture; the possibility of inducing a temporary state of increased susceptibility ("negative phase"); the discomfort due to the local and general reaction to inoculation, and the labor and expense involved.

The first-mentioned danger is probably negligible. The danger of inducing a negative phase of immunity is an unknown quantity. It has not been proven to be a real danger in antityphoid and antiplague vaccinations, and need not, for the present, be considered as a valid objection to antimeningitis vaccination. Such danger as may exist would in all probability be reduced by the simultaneous injection of antimeningitis serum.

According to Sophian and Black, a local reaction, more or less painful, is common. There may be no general constitutional reaction, but frequently there are mild symptoms, headache, malaise, and fever, lasting for 24 hours. More severe symptoms are said to have been noted, but to be unusual.

Even granting the efficiency of antimeningitis vaccination as a prophylactic, the labor and expense would be very great in proportion to the results attained. In dealing with an epidemic of smallpox, for example, a disease which, when epidemic, may be expected to attack a very large proportion of those exposed who are unvaccinated, the results attained by wholesale vaccination are relatively great. One may count on preventing by this means from 25 to 50 cases of smallpox in every 100 exposed persons not previously vaccinated.

In vaccination against a disease such as meningitis, which is by nature of rare occurrence, one may count on the prevention at most of only one to ten cases in each thousand persons vaccinated. It is evident that unless the vaccination is done on a very extensive scale it offers but little chance of materially reducing the prevalence of the disease. Notwithstanding its possible dangers, and the lack of proof that it is efficient, antimeningitis vaccination deserves full consideration as a prophylactic measure, because of the inefficiency of other preventive measures and the terrible consequences of the disease.

It would seem wise at present to approve the vaccination of all who may desire it, in communities where the disease is epidemic, or where an epidemic seems likely to occur, especially of physicians and nurses who are likely to come into intimate contact with cases. The question will often arise whether persons already intimately exposed to cerebrospinal meningitis should be vaccinated and whether there is more chance of protection or of inducing a phase of increased susceptibility. There is ample ground for an honest difference of opinion on the subject; but the burden of proof is apparently on those who assert that there is danger from the "negative phase."

It does not appear advisable at present to attempt to make antimeningitis vaccination compulsory, nor to divert to wholesale vaccination large sums of money, which might otherwise be applied, perhaps with more certainty of results, to the early diagnosis, serum treatment, and hospital care of developed cases.

Wherever antimeningitis vaccination is employed it should be done as an experiment. Careful records should be obtained of each person vaccinated and of the incidence of meningitis among the vaccinated and the unvaccinated population of each community.

DERATIZATION OF RAT-PROOF BUILDINGS.

A note by W. C. RUCKER, Assistant Surgeon General, United States Public Health Service.

It not infrequently happens that in rat-proofing buildings rodents are imprisoned. Sometimes buildings which are rat proof in the ordinary sense of the term may become rat infested by the introduction of rodents in freight. In both situations the rodents are protected from their natural enemies, and if the food is sufficient their numbers may increase greatly. In granaries, storehouses, and abattoirs it is frequently very difficult to eradicate them by the ordinary means. The animals soon become trap shy, and while a considerable number may be captured in barrel traps it frequently seems impossible to effect a complete deratization in such a situation.

The ordinary poisons such as arsenic, phosphorus, barytes, and the like, may be contraindicated on account of the danger of impregnating foodstuffs with them. In such a situation, particularly in abattoirs, Danyz virus should not be used, because of its pathogenic action on man. What is required is some agent which will kill the rat that takes it and at the same time will be without danger of poisoning the foodstuff. For this purpose a poison made according to the following formula has been found efficacious: Plaster of Paris, 6 parts; pulverized sugar, 1 part; flour, 2 parts.

This should be exposed in a dry place in open dishes. It is wise to place the dishes in the rat's runway. In order to make the bait more attractive the edge of the dish may be rubbed with a piece of fish or smeared with oil in which sardines have been packed. The plaster of Paris forms a cast in the alimentary canal of the rat, and hence produces death.

PREVALENCE OF DISEASE.

IN CERTAIN STATES AND CITIES.

SMALLPOX.

Arkansas—At Ashdown.

The secretary of the Arkansas State Board of Health reported by telegraph from Little Rock February 3, 1913, that three cases of smallpox in one family had been notified in Ashdown, Little River County.

California report for December, 1912.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
California (Dec. 1-31):			California (Dec. 1-31)—Contd.		
Counties—			Counties—Continued.		
Alameda.....	5	1	San Diego.....	2	
Amador.....	18		San Francisco.....	6	
Butte.....	1		Santa Clara.....	1	
Kern.....	1		Shasta.....	37	
Los Angeles.....	3		Siskiyou.....	1	
Marin.....	3		Tulare.....	1	
Riverside.....	1				
Sacramento.....	3		Total.....	86	1
San Bernardino.....	3				

California—In San Francisco and Vicinity.

Surg. Long, of the Public Health Service, reported by telegraph from San Francisco February 4, 1913, that 74 cases of smallpox with 1 death had been notified in San Francisco since July 1, 1912, and that 6 cases were still in hospital on the date of the report; that 25 cases had been notified in Oakland since December 1, 1912, with 7 cases still on hand; that 1 case was present in Alameda; that 9 cases with 5 deaths had been reported in Berkeley since December 17, with 4 cases still under treatment.

California—In Imperial County.

Acting Asst. Surg. Reichter, of the Public Health Service, reported by telegraph from Calexico, Cal., February 4, 1913, that 18 cases of smallpox with 4 deaths had been notified in Imperial County during the month of January, and that no new cases were reported during the week ended February 1, 1913.

Florida—At Pensacola.

Acting Asst. Surg. Kennedy of the Public Health Service reported by telegraph from Pensacola, Fla., February 1, 1913, that 160 cases of smallpox had been notified at Pensacola since December 28, 1912, only 7 of the cases reported having occurred among the white population; that the health authorities had performed many vaccinations; and that 20 new cases had been reported during the week ended January 25.

Iowa—Fort Dodge and Des Moines.

The secretary of the State board of health of Iowa reported January 29, 1913: The following epidemics of smallpox have been reported to this office to date: Fort Dodge, Webster County, 29 cases; Des Moines, Polk County, 69 cases. Thirty-one of the cases in Des Moines were reported to you January 23, and since that date 38 additional cases have been quarantined.

Oklahoma—Virulent form.

Information was received through the United States Commissioner of Indian Affairs January 31, that there were 31 cases of virulent smallpox in McCurtain County, Okla.; that additional cases were occurring daily; and that 200 exposed persons were under quarantine; and that 75 cases, with 16 deaths, had occurred in Choctaw County.

The Department of the Interior has begun the general vaccination of all Indians in the vicinity.

The State Commissioner of Health of Oklahoma reported by telegraph from Oklahoma City February 1, 1913, that 32 cases of smallpox had been notified in McCurtain County and 68 in Choctaw County. Of the latter number 41 cases were reported in the town of Hugo. All reported cases were under quarantine.

Pennsylvania—Allegheny Home, Woodville—Virulent form.

Surg. Stoner reports an outbreak of virulent smallpox at the Allegheny Home, Woodville, with a total to February 4 of 10 cases and 3 deaths. The first case occurred January 23, the last February 4, 1913. The first 3 cases ended fatally.

Texas—At Galveston.

Surg. Guiteras of the Public Health Service reported by telegraph from Galveston February 1, 1913, that 2 new cases of smallpox, with 1 death, had been notified at Galveston, making a total of 7 cases to the date of his report. One case had been discharged and 5 cases remained under treatment.

City Reports for Week Ended Jan. 18, 1913.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Baltimore, Md.....	12	.....	New Orleans, La.....	1	.....
Bayonne, N. J.....	3	.....	Niagara Falls, N. Y.....	2	.....
Cambridge, Ohio.....	5	.....	Oakland, Cal.....	1	.....
Chattanooga, Tenn.....	1	.....	Oklahoma, Okla.....	1	.....
Chicago, Ill.....	22	.....	Omaha, Nebr.....	3	.....
Danville, Ill.....	3	.....	Philadelphia, Pa.....	3	.....
Detroit, Mich.....	5	.....	Portsmouth, Va.....	1	.....
Evansville, Ind.....	40	.....	Providence, R. I.....	4	.....
Johnstown, Pa.....	2	.....	Sacramento, Cal.....	3	.....
Knoxville, Tenn.....	4	.....	Spokane, Wash.....	1	.....
La Crosse, Wis.....	7	.....	Toledo, Ohio.....	10	.....
Los Angeles, Cal.....	1	.....	Washington, D. C.....	9	.....
Manchester, N. H.....	3	.....	Wilmington, N. C.....	2	.....
Milwaukee, Wis.....	6	.....	Zanesville, Ohio.....	12	.....

CEREBROSPINAL MENINGITIS.

Illinois.

Surg. Gassaway of the Public Health Service reported by telegraph from Cairo, Ill., February 2, 1913, that there had been a total of 19 cases of cerebrospinal meningitis reported at Gale, Alexander County, since the beginning of the outbreak December 31, 1912. Fourteen cases had died, 3 had recovered and 2 were convalescent.

Kentucky.

The secretary of the State Board of Health of Kentucky reported by telegraph January 31, 1913, that cerebrospinal meningitis had been reported present in Mason and Lewis Counties.

Cases and Deaths Reported by Cities for Week Ended Jan. 18, 1913.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Baltimore, Md.....	3	2	Newark, N. J.....	1	.....
Boston, Mass.....	1	.....	New Bedford, Mass.....	1	1
Cincinnati, Ohio.....	1	.....	New Orleans, La.....	3	1
Dayton, Ohio.....	.....	1	Newport, Ky.....	1	1
Haverhill, Mass.....	1	.....	New York, N. Y.....	6	6
Kansas City, Kans.....	2	.....	Peoria, Ill.....	1	.....
La Crosse, Wis.....	.....	2	Philadelphia, Pa.....	1	.....
Los Angeles, Cal.....	1	.....	Pittsburgh, Pa.....	2	1
Nashville, Tenn.....	1	1	St. Louis, Mo.....	1	1

POLIOMYELITIS (INFANTILE PARALYSIS).

Cases and Deaths Reported by Cities for Week Ended January 18, 1913.

During the week ended January 18, 1913, poliomyelitis was reported by cities as follows: New York, N. Y., 4 cases, with 1 death; Los Angeles, Cal., 5 cases, with 4 deaths; Worcester, Mass., 1 death.

ANTHRAX.**Wilmington, Del.—In Man.**

J. Austin Ellison, secretary of the Board of Health of Wilmington, Del., reported January 24, 1913, that during the preceding week there had been 4 cases of anthrax in man with 1 death at Wilmington, and that all the patients had been employed in a "morocco factory," where they handled imported hides.

ERYSIPELAS.**Cases and Deaths Reported by Cities for Week Ended Jan. 18, 1913.**

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Binghamton, N. Y.	4	1	New York, N. Y.	24	11
Boston, Mass.	1	1	Norristown, Pa.	1	1
Braddock, Pa.	1	2	Oakland, Cal.	1	2
Buffalo, N. Y.	6	2	Philadelphia, Pa.	13	2
Cincinnati, Ohio.	7	2	Pittsburgh, Pa.	16	2
Cleveland, Ohio.	12	2	Reading, Pa.	2	1
Hartford, Conn.	2	1	Richmond, Va.	1	1
Kalamazoo, Mich.	1	1	Rutland, Vt.	1	1
Malden, Mass.	3	1	St. Louis, Mo.	15	1
Milwaukee, Wis.	3	1	South Bethlehem, Pa.	1	1
New Castle, Pa.	1	1	York, Pa.	1	1

PELLAGRA.**Georgia.**

During the week ended January 18, 1913, one case of pellagra was reported at Columbus, Ga.

PLAGUE.**Rats Collected and Examined for Plague.**

Places.	Week ended—	Found dead.	Total collected.	Examined.	Found infected.
California:					
Cities—					
Berkeley	Jan. 18, 1913	194	140		
Oakland	do.	7	702	609	
San Francisco	do.	36	1,694	1,367	
Washington:					
City—					
Seattle	do.	970	921		

California—Squirrels Collected and Examined for Plague Infection.

During the week ended January 18, 1913, there were examined for plague infection 18 ground squirrels from San Joaquin County. No plague-infected squirrel was found.

PNEUMONIA.

Cases and Deaths Reported by Cities for Week Ended Jan. 18, 1913.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Altoona, Pa.		2	New Bedford, Mass.		4
Aurora, Ill.		3	New Castle, Pa.	1	
Baltimore, Md.		34	Newburyport, Mass.		3
Binghamton, N. Y.	5	2	New Orleans, La.		5
Boston, Mass.		37	Newport, Ky.	2	2
Braddock, Pa.	2		Newton, Mass.		3
Bridgeport, Conn.		6	New York, N. Y.		162
Brookline, Mass.		1	Niagara Falls, N. Y.		2
Buffalo, N. Y.		7	Norristown, Pa.	1	4
Cambridge, Mass.		6	North Adams, Mass.		1
Cambridge, Ohio.		1	Oakland, Cal.		8
Chelsea, Mass.		2	Oklahoma, Okla.		5
Chicago, Ill.	54	161	Omaha, Nebr.		7
Chicopee, Mass.		1	Passaic, N. J.		6
Cincinnati, Ohio.		20	Pawtucket, R. I.		1
Cleveland, Ohio.	41	20	Peoria, Ill.		7
Coffeyville, Kans.	1		Philadelphia, Pa.	42	63
Columbus, Ind.		1	Pittsburgh, Pa.	30	41
Concord, N. H.		1	Plainfield, N. J.		2
Cumberland, Md.		4	Providence, R. I.		3
Dayton, Ohio.		4	Reading, Pa.	2	5
Dunkirk, N. Y.	2	2	Richmond, Va.		8
Elizabeth, N. J.		5	Rockford, Ill.		1
Elmira, N. Y.		2	Sacramento, Cal.	2	8
Evansville, Ind.		4	Saginaw, Mich.	3	1
Everett, Mass.		1	St. Joseph, Mo.	4	7
Fall River, Mass.		8	San Diego, Cal.	4	4
Galesburg, Ill.		5	San Francisco, Cal.	18	
Grand Rapids, Mich.	4		Saratoga Springs, N. Y.	5	2
Harrisburg, Pa.		6	Schenectady, N. Y.	14	2
Hartford, Conn.		4	South Bend, Ind.		4
Haverhill, Mass.		1	South Bethlehem, Pa.	1	
Jersey City, N. J.		11	South Omaha, Nebr.	4	
Kalamazoo, Mich.	2		Springfield, Ill.	4	3
Knoxville, Tenn.		3	Springfield, Mass.		5
La Crosse, Wis.		2	Spokane, Wash.	1	2
La Fayette, Ind.		1	Steelton, Pa.	1	
Lancaster, Pa.	4		Superior, Wis.		1
Lexington, Ky.		5	Taunton, Mass.		3
Logansport, Ind.		1	Toledo, Ohio.		4
Lowell, Mass.		10	Waltham, Mass.		1
Lynchburg, Va.	2	2	Washington, D. C.		10
Lynn, Mass.		1	Wilkes-Barre, Pa.		3
Malden, Mass.		2	Wilmington, N. C.		2
Manchester, N. H.	5	5	Woburn, Mass.		1
Medford, Mass.		2	York, Pa.	1	
Melrose, Mass.		1	Zanesville, Ohio.		2
Moline, Ill.		1			

SCARLET FEVER, MEASLES, DIPHTHERIA, AND TUBERCULOSIS.

Pittsburgh—Measles.

Surg. Stoner, of the Public Health Service, reported by telegraph from Pittsburgh, February 1, 1913, that during the week ended January 25, 1913, there had been reported in Pittsburgh 430 cases of measles, making a total of 3,655 cases since the beginning of the outbreak, November 1, 1912.

Richmond, Va.—Measles Epidemic.

Dr. E. C. Levy, chief health officer of Richmond, Va., reported February 5 that the city of Richmond is in the midst of measles epidemic; that through the knowledge gained by a study of the prevalence of the disease in times past the health department was again able to warn the physicians and citizens of the impending outbreak at a time when there were only a half dozen known cases in the

city. The epidemic began the end of November last. In January, 1,616 cases were reported, and cases are now being notified at the rate of 100 a day. So far there have been only 7 deaths.

Cases and Deaths Reported by Cities for Week Ended Jan. 18, 1913.

Cities.	Popula- tion, United States census 1910.	Total deaths from all causes.	Diph- theria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Over 500,000 inhabitants:										
Baltimore, Md.	558,485	215	27	5	42	1	39		39	29
Boston, Mass.	670,585	277	31	2	127	1	46	5	46	27
Chicago, Ill.	2,185,283	792	262	46	492	12	435	37	217	68
Cleveland, Ohio.	560,663	169	44	4	85		25	2	28	9
New York, N. Y.	4,766,883	1,546	397	25	463	5	301	12	483	171
Philadelphia, Pa.	1,549,008	507	62	10	348	8	122	4	90	47
Pittsburgh, Pa.	533,905	184	35	3	355	4	31		32	15
St. Louis, Mo.	687,029	262	84	6	288	2	29	2	44	29
From 300,000 to 500,000 inhab- itants:										
Buffalo, N. Y.	423,715	158	8	1	177	4	18		30	15
Cincinnati, Ohio.	364,463	157	8		422	11	23	1	22	16
Detroit, Mich.	465,766	183	39	8			35			
Los Angeles, Cal.	319,198	156	5		4		10		58	18
Milwaukee, Wis.	373,857	116	20	2	10	1	28	2	16	10
Newark, N. J.	347,469	92	36		20		28		40	
New Orleans, La.	339,075	127	43	1	29	1	11		21	20
San Francisco, Cal.	416,912	179	7		1		6		21	21
Washington, D. C.	331,069	110	7	2	169	1	20		29	17
From 200,000 to 300,000 inhab- itants:										
Jersey City, N. J.	267,779	86		4						7
Providence, R. I.	224,326	74	25	2	3		10	1		9
From 100,000 to 200,000 inhab- itants:										
Bridgeport, Conn.	102,054	37	3				4	3	1	3
Cambridge, Mass.	104,839	26	2		17		3		10	5
Columbus, Ohio.	181,548	69	12	1	8		13	11	12	6
Dayton, Ohio.	116,577	37	8				3			4
Fall River, Mass.	119,295	35	4	1	1		7		10	4
Grand Rapids, Mich.	112,571	33	3		1		3			1
Lowell, Mass.	106,294	39	5		3		14		5	1
Nashville, Tenn.	110,364	33	1	1					2	2
Oakland, Cal.	150,174	46	3	1					2	2
Omaha, Nebr.	124,096	48	9	3	2		6		2	3
Richmond, Va.	127,628	67	4		428		6			5
Spokane, Wash.	104,402				2		1		1	1
Toledo, Ohio.	168,497	64	3	1	40		4		6	6
Worcester, Mass.	145,986	59	17	2	3		13		6	4
From 50,000 to 100,000 inhab- itants:										
Altoona, Pa.	52,127	14	5				3			
Bayonne, N. J.	55,545		4		3		16		1	
Brockton, Mass.	56,878	12			3		1		3	1
Camden, N. J.	94,538		12		10		5		7	
Elizabeth, N. J.	73,409		4		9		4		1	
Evansville, Ind.	69,647	17	6				11	1		5
Harrisburg, Pa.	64,186	30	10		2		1		2	1
Hartford, Conn.	98,915	41	3		14		21	3	5	
Hoboken, N. J.	70,324		3		3		1		3	4
Johnstown, Pa.	55,482	21	15		37	1	3			
Kansas City, Kans.	82,331		5		5		2			
Lynn, Mass.	89,336	18	1		55		8		3	2
Manchester, N. H.	70,063	28	5		2		3			
New Bedford, Mass.	96,652	40	11	4	14		3		5	1
Oklahoma City, Okla.	64,205				1		1			1
Pasadena, N. J.	54,773	24	3		8		8			1
Pawtucket, R. I.	51,622									3
Peoria, Ill.	66,950	25	1		8		4			1
Reading, Pa.	96,071	34	5		45		1		1	2
Saginaw, Mich.	50,510	22	9	1	22		2			1
St. Joseph, Mo.	77,403	37	1	3	1		3		1	4
Schenectady, N. Y.	72,826	21	2		2		4		1	1
South Bend, Ind.	53,684	18	2		1		4		1	2
Springfield, Ill.	51,678	18	6							
Springfield, Mass.	88,926	29	2		6		4		1	1
Trenton, N. J.	96,815	44	4		10	2	3		3	3
Wilkes-Barre, Pa.	67,105	20	3		3		5		9	

Cases and Deaths Reported by Cities for Week Ended Jan. 18, 1913—Contd.

Cities.	Popula- tion, United States census 1910.	Total deaths from all causes.	Diph- theria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
From 25,000 to 50,000 inhabitants:										
Atlantic City, N. J.	46,150	17	1		2		2			
Aurora, Ill.	29,807	9	1				4			
Binghamton, N. Y.	48,443	20							2	
Brookline, Mass.	27,792	6	2		1		2		2	
Chattanooga, Tenn.	44,604						1			
Chelsea, Mass.	32,452	19	5		3		2			
Chicopee, Mass.	25,401	6					1	1	1	
Danville, Ill.	27,871	8			1			1		
East Orange, N. J.	34,371		1				5		1	
Elmira, N. Y.	37,176	10	5		9		3		1	
Everett, Mass.	33,484	7	2		1				1	
Fitchburg, Mass.	37,826	12			57		1			
Haverhill, Mass.	44,115	9			26		1		2	
Kalamazoo, Mich.	39,437	14		1			1		3	
Knoxville, Tenn.	36,346	13	1		7					
La Crosse, Wis.	30,417	16								
Lancaster, Pa.	47,227		5		11		3		1	
Lexington, Ky.	35,099	34	1		1				4	
Lynchburg, Va.	29,494	11			15		1			
Malden, Mass.	44,404	10	2	1	10				1	
Newcastle, Pa.	36,280		5		19					
Newport, Ky.	30,309	7					4			
Newton, Mass.	39,806	15			1					
Niagara Falls, N. Y.	30,445	14	1	2	61	1				
Norristown, Pa.	27,875	9	1	1	1					
Orange, N. J.	29,630	9					5		1	
Pittsfield, Mass.	32,121	16	3				4	1		
Portsmouth, Va.	33,100	9	1		2					
Racine, Wis.	38,002	22					2			
Roanoke, Va.	34,874	9	1		2				3	
Rockford, Ill.	45,401	11	4							
Sacramento, Cal.	44,696	27			3					
Salem, Mass.	43,697	8					4			
San Diego, Cal.	39,578	6	1						2	
South Omaha, Nebr.	26,259	11	1							
Superior, Wis.	40,384	10	1				2			
Taunton, Mass.	34,250	15							1	
Waltham, Mass.	27,834	5	4	1	3		4		1	
West Hoboken, N. J.	35,403		5		5		1		1	
Wheeling, W. Va.	41,641	11	7		31		1			
Wilmington, N. C.	25,748	10								
York, Pa.	44,750				27		1			
Zanesville, Ohio.	28,026	6	4		1		4			
Less than 25,000 inhabitants:										
Beaver Falls, Pa.					5					
Biddeford, Me.	17,079	3								
Braddock, Pa.	17,759				15		1			
Clinton, Mass.	13,075	2	2		66					
Coffeyville, Kans.	12,687		1						1	
Columbus, Ga.	20,554	2								
Columbus, Ind.		4	1							
Concord, N. H.	21,479	14			5		1			
Cumberland, Md.	21,839	17							3	
Dunkirk, N. Y.		6	2		1				1	
Galesburg, Ill.	22,089	13	2							2
Harrison, N. J.	14,489	3	1							
Kearny, N. J.	18,659	6			2				1	
La Fayette, Ind.	20,081	13	1							
Logansport, Ind.		5			2		1			
Marlboro, Mass.	14,759	4			1					
Masillon, Ohio.	23,830	4								1
Medford, Mass.	23,150	7	1		8		1		2	
Melrose, Mass.	15,715	9			1		2		1	
Moline, Ill.	24,190	8			1		2		1	
Montclair, N. J.		3			1		4		1	
Morristown, N. J.	12,507	6					1		1	
Nanticoke, Pa.	18,857	4								
Newburyport, Mass.	19,240	6	1		1				2	
North Adams, Mass.	22,019	10	1							1
Northampton, Mass.	19,931	4	1	1	2		4		2	
Palmer, Mass.		1								
Plainfield, N. J.	23,556	6			1				1	
Rutland, Vt.	13,546	1			17					
Saratoga Springs, N. Y.		4					1		1	
South Bethlehem, Pa.		8			3		1		2	
Steelton, Pa.	14,476	7					1		1	2
Warren, Pa.	11,080	3			27					
Wilkesburg, Pa.		9	1		17		2			
Woburn, Mass.	18,594	4								

IN INSULAR POSSESSIONS.

HAWAII.

Plague-Infected Rats Found.

On December 30, 1912, a plague-infected rat was found at 2 House Camp, Paauhau, Hawaii. The last previous known case of rodent plague in that locality occurred March 2, 1912.

During the week ended January 11, 1913, plague was verified in a rat found dead at the Kukuihaele Landing warehouse.

Examination of Rodents for Plague Infection.

During the week ended January 11, 1913, there were examined for plague infection 273 rats. No plague-infected rat was found.

At Hilo rats and mongoose were examined as follows: Week ended January 4, 1913, 515; week ended January 11, 1913, 915. No plague infection was found.

At Honokaa rats and mongoose were examined as follows: Week ended January 4, 1913, 1,154. One plague-infected rat was found; week ended January 11, 1913, 1,536. One plague-infected rat was found.

Case of Leprosy on Vessel.

The steamship *Siberia* arrived January 15 at Honolulu from San Francisco, Cal., with a case of leprosy on board in the person of a Japanese steerage passenger. The patient went to California from Japan about six years ago, and during the greater part of his residence in California lived at Monterey and was engaged in fishing. The disease is of the tubercular form with marked infiltration of the forehead, cheeks, nose, and lobes of ears. The patient was in transit to Japan.

PHILIPPINE ISLANDS.

Plague in Manila.

Passed Asst. Surg. Heiser, chief quarantine officer and director of health for the Philippine Islands, reports the occurrence of plague in Manila as follows: Week ended November 30, 1912, 3 cases with 3 deaths; week ended December 7, 1912, 2 cases with 1 death; week ended December 14, 1912, 2 cases with 1 death.

PORTO RICO.**Plague Situation.****Passed Asst. Surg. Creel reports:**

RATS EXAMINED JAN. 11 TO 18, 1913.

Places.	Rats examined.	Rats found infected.
All Porto Rico.....	1,959	.....
San Juan municipality:		
San Juan.....	100	.....
Puerta de Tierra.....	34	.....
Santurce.....	144	.....

The last case of plague in man occurred in San Juan September 12, 1912; the last plague-infected rat was found at Caguas December 19, 1912.

FOREIGN REPORTS.

BRAZIL.

Bahia—Yellow Fever.

According to information received February 3, there were reported at Bahia during the 10 days preceding that date 4 cases of yellow fever with 1 death.

CUBA.

Habana—Transmissible Diseases.

JAN. 10 TO 20, 1913.

Diseases.	New cases.	Deaths.	Remain- ing under treat- ment.
Leprosy.....	1	2	246
Malaria.....	1	1	2
Typhoid fever.....	12	1	40
Diphtheria.....	32	2	24
Scarlet fever.....	16	1	24
Measles.....	12	1	11
Paratyphoid.....	2	1	6

JAPAN.

Cholera Epidemic Terminated.

Surg. Irwin at Yokohama reports January 6: No case of cholera has been reported in Yokohama since December 18 and none in the Empire since December 28, 1912. The epidemic may therefore be considered at an end.

MEXICO.

San Juan Bautista—Yellow Fever Epidemic Terminated.

According to information dated January 12, the yellow fever epidemic at San Juan Bautista, State of Tabasco, has been declared by the board of health to be extinct. No case of the disease has been reported in the State since November, 1912.

Yellow fever was reported present at San Juan from May 4 to November 3, 1912, with a total of 58 cases and 25 deaths.

RUSSIA.**Morbidity Reports for the Year 1909.**

In Russia physicians and others practicing medicine are required to keep a list of the cases treated by them, and at the end of the year to forward the list, or a transcript thereof, to the district medical department. These are then forwarded to the provincial or Government authorities by whom the compiled reports are in turn forwarded to the National Government at St. Petersburg, and there compiled for all Russia.

Acting Asst. Surg. De Forest has forwarded a statement of the morbidity returns for the year 1909, as published in the Russian Official Yearbook of 1911. Dr. De Forest states that the tabulation includes the reports of the hospitals and practicing physicians, and both the urban and rural populations; that the system includes all parts of the Empire, but that naturally the difficulties accompanying the practice of medicine in certain of the distant and outlying Provinces are such that the figures for them must necessarily be incomplete.

RUSSIAN MORBIDITY REPORTS FOR THE YEAR 1909.

Governments and Provinces.	Variola.	Scarlatina.	Diphtheria.	Measles.	Whooping cough.	Influenza.	Typhus fever.	Abdominal typhus (typhoid fever).	Dysentery.	Cholera.		Epidemic gastro-enteritis.
										Nostras.	Asiatic.	
1 Archangel.....	1,678	2,070	208	1,658	2,228	13,574	161	1,338	199	.....	749	518
2 Astrakhan.....	1,825	1,745	2,163	1,930	1,377	11,158	2,006	1,584	2,300	.....	37	147
3 Bessarabia.....	2,757	7,666	32,571	8,404	9,029	34,793	2,812	16,927	13,595	75	.....	12,386
4 Vilna.....	1,010	1,896	882	1,426	2,383	13,542	1,492	3,979	707	23	256	5,151
5 Vitebsk.....	1,914	6,016	1,085	2,635	4,088	112,946	1,378	2,718	1,336	488	3,415	2,319
6 Vladimir.....	3,071	6,629	2,324	2,693	10,985	112,946	1,378	2,718	1,336	488	3,415	6,043
7 Vologda.....	3,071	4,141	4,699	2,693	6,977	35,700	7,992	1,957	1,154	66	631	1,501
8 Volinsk.....	1,460	10,714	8,713	12,367	34,748	7,793	7,793	14,778	4,962	240	1	2,824
9 Varonesch.....	4,741	11,366	20,675	6,894	16,030	38,905	7,703	18,340	10,192	149	.....	13,280
10 Viatka.....	3,175	6,913	416	6,097	17,030	35,073	5,575	3,978	8,384	31	5	2,572
11 Grodno.....	1,345	2,971	2,309	2,968	2,636	14,242	1,381	3,384	3,681	223	50	4,797
12 Don-Kossack District.....	2,445	5,893	18,579	2,473	5,271	34,408	4,456	6,096	5,512	178	101	6,634
13 Ekaterinoslav.....	3,314	11,003	25,920	10,013	14,215	71,586	7,934	22,035	16,842	281	398	13,426
14 Kasan.....	1,154	7,933	2,568	4,330	10,134	33,926	1,183	2,096	5,886	57	6	4,050
15 Kaluga.....	1,516	3,185	1,881	5,057	5,914	35,803	1,922	3,917	3,407	23	9	4,740
16 Kieff.....	3,817	19,358	26,627	11,080	10,465	58,976	8,957	23,085	15,059	1,016	421	9,182
17 Korako.....	1,556	1,434	1,303	2,375	1,442	8,950	200	2,006	3,399	176	.....	1,191
18 Kostroma.....	1,647	5,038	778	3,955	9,920	71,665	282	2,032	3,464	30	419	2,907
19 Kurland.....	98	1,916	881	1,310	838	6,594	29	496	97	115	282	378
20 Kursk.....	1,456	9,272	4,671	3,809	9,020	50,290	5,569	15,176	8,952	64	50	1,152
21 Livland.....	1,486	3,126	2,026	4,821	4,194	13,787	1,322	1,952	1,499	156	318	1,577
22 Minsk.....	2,116	11,131	5,910	9,163	7,984	51,209	2,572	10,624	4,082	129	2	4,086
23 Mohilev.....	2,653	8,320	2,791	6,358	6,290	73,077	2,054	13,624	2,905	.....	209	6,976
24 Moscow.....	8,116	25,730	15,708	24,529	22,492	340,022	4,855	7,280	19,705	203	304	21,028
25 Nihil Gorodsk.....	1,298	3,906	1,750	4,189	11,555	34,536	2,482	3,468	3,388	.....	284	1,216
26 Novogorodsk.....	3,217	4,681	1,734	4,932	10,100	41,451	1,551	3,893	1,091	68	777	850
27 Oloneiz.....	3,081	4,539	45	3,374	2,047	14,784	241	666	53	8	33	199
28 Orenburg.....	1,306	2,804	5,759	2,701	3,843	12,502	440	5,058	2,872	71	.....	2,387
29 Orloff.....	3,294	7,714	3,794	6,238	10,590	61,919	11,710	16,001	7,581	33	.....	4,354
30 Pensa.....	3,705	6,637	3,888	3,787	10,930	27,348	2,793	2,900	4,879	.....	.....	3,847
31 Perm.....	2,907	8,263	3,308	10,729	17,573	145,021	3,255	7,240	12,325	191	48	9,873
32 Podolsk.....	8,871	8,172	12,692	9,582	7,088	44,102	3,811	25,053	13,206	.....	243	6,262
33 Poltava.....	3,838	16,575	17,005	13,341	15,332	111,381	3,587	16,273	14,371	133	34	269
34 Pskov.....	2,217	7,556	1,505	2,588	7,363	23,128	3,311	3,803	803	.....	671	8,824
35 Rjasan.....	3,895	7,355	4,201	8,390	8,681	45,579	3,211	5,861	3,912	16	106	7,085
36 Samara.....	2,969	11,913	36,105	6,399	15,507	48,209	3,406	9,351	12,553	226	761	7,147
37 St. Petersburg.....	3,436	9,548	9,494	20,531	19,330	61,780	796	8,475	2,499	1,026	9,104	8,050
38 Saratov.....	2,026	16,391	15,404	20,531	21,240	103,486	6,413	11,423	14,240	173	81	7,844
39 Simbirsk.....	1,644	4,549	2,616	3,790	11,984	63,028	5,146	4,358	4,749	38	15	3,773
40 Smolensk.....	2,053	4,759	2,288	4,713	6,766	52,487	5,160	6,179	5,226	29	.....	3,097

RUSSIAN MORBIDITY REPORTS FOR THE YEAR 1909—Continued.

Governments and Provinces.	Variola.	Scarlatina.	Diphtheria.	Measles.	Whooping cough.	Influenza.	Typhus fever.	Abdominal typhus (typhoid fever).	Dysentery.	Cholera.		Epidemic gastro-enteritis.
										Nostras.	Asiatic.	
EUROPEAN RUSSIA—CON.												
41 Tatars.....	902	4,021	12,469	7,090	12,760	53,147	4,970	9,767	4,887	174	303	9,937
42 Tambov.....	3,408	15,164	7,892	10,345	18,040	79,521	11,787	25,888	8,893	143	10	6,984
43 Tver.....	5,352	5,828	2,816	4,821	10,645	39,442	3,167	4,857	3,643	221	728	3,572
44 Tula.....	1,940	49,192	2,816	6,537	7,217	37,412	3,872	4,938	3,653	30	3	2,531
45 Ufa.....	1,200	5,071	4,333	3,774	7,072	26,550	1,024	2,697	3,616	53	1	1,859
46 Charkov.....	4,060	19,182	12,740	11,565	20,948	101,128	9,850	39,056	12,069	141	19	12,560
47 Cherson.....	2,814	9,057	42,487	12,641	15,673	87,142	7,154	27,441	21,722	237	157	17,751
48 Chernigov.....	1,512	12,523	15,915	10,462	16,466	82,810	2,421	9,409	7,185	79	172	7,893
49 Estland.....	1,127	3,583	1,980	1,474	6,434	3,665	2	315	315	143	94	113
50 Jaroslavl.....	1,145	3,577	1,963	4,249	6,744	53,201	1,334	2,285	1,331	35	1,036	2,953
Total.....	113,354	370,824	403,624	325,005	479,359	2,775,954	165,581	441,442	308,116	6,908	23,420	267,190
POLISH PROVINCES.												
51 Warsaw.....	4,111	4,216	2,361	3,127	1,975	3,326	1,402	2,573	895	108	.....	2,629
52 Kalisz.....	638	1,282	1,084	1,647	569	1,462	15	246	246	.....	.....	447
53 Kellitz.....	151	1,475	1,690	1,530	964	2,754	114	1,118	1,056	311	.....	877
54 Lomsehn.....	170	994	270	680	327	1,497	28	1,446	1,298	19	.....	618
55 Lublin.....	635	2,307	1,550	1,583	1,976	2,177	471	2,703	968	43	.....	1,803
56 Piotrkow.....	1,692	4,546	2,409	4,247	3,996	7,826	100	2,340	1,357	60	.....	4,367
57 Plotzka.....	679	816	816	1,002	798	2,173	9	646	370	71	.....	1,398
58 Radom.....	507	803	838	1,214	1,126	2,003	180	1,094	478	62	.....	817
59 Suwalki.....	716	334	211	447	258	1,193	.....	268	93	15	5	331
60 Sedletz.....	691	2,147	1,109	2,916	1,369	2,761	396	1,470	1,045	141	.....	1,211
Total.....	9,900	18,735	11,317	17,393	13,358	27,172	2,715	13,026	6,606	836	5	15,128
CAUCASUS												
61 Baku.....	502	553	712	1,181	2,321	12,146	215	1,585	5,831	1	373	2,517
62 Batum.....	13	99	28	10	288	219	36	1,159	159	.....	.....	29
63 Dagistan.....	1,731	423	59	1,302	402	1,940	397	308	308	.....	.....	670
64 Elezawetpol.....	279	803	91	453	126	2,177	35	664	853	4	.....	194
65 Karsk.....	900	692	388	537	231	1,952	4	570	177	.....	.....	542
66 Kuban.....	3,914	6,611	21,051	8,416	3,721	8,468	3,809	2,845	3,182	37	.....	17,790
67 Kutaisk.....	803	803	1,187	8,416	1,075	4,699	36	3,092	4,166	21	.....	2,779
68 Stavropol.....	2,594	1,648	11,213	3,865	1,141	5,775	110	755	1,582	17	1	2,761
69 Tersk.....	590	1,951	1,881	2,162	386	3,351	935	1,293	2,136	1	.....	4,455

70	Tiflis.....	343	1,595	290	505	640	8,946	324	823	2,456	125	1,928
71	Black Sea coast.....	381	1,299	191	504	372	3,058	157	404	570	6	725
72	Erivan.....	1,031	548	229	346	686	2,626	3	423	2,071		744
	Total.....	12,453	17,115	36,320	19,975	11,389	55,357	6,051	12,851	23,801	212	33,304
SIBERIA.												
73	Amur.....	23	582	253	813	591	4,995	2	1,578	1,310	92	2,843
74	Ensel.....	381	1,340	1,046	1,871	4,209	14,710	495	6,217	6,400	159	3,329
75	Zabakal.....	120	1,178	354	819	2,598	13,287	3	1,696	3,063	158	2,275
76	Irkutsk.....	1,185	1,509	999	7,220	4,234	36,435	145	1,956	3,083		1,892
77	Kanchatka.....						754			25		
78	Primor.....	378	216	532	889	1,103	12,563	74	1,405	2,539	34	3,082
79	Sachalin.....	8		5	4	3	229			3		
80	Tobolsk.....	670	1,158	904	1,822	4,419	15,781	2,730	2,700	1,188	20	294
81	Tomsk.....	1,949	1,785	1,253	2,334	5,396	24,490	736	8,772	9,450	236	7,992
82	Jakutsk.....	5	28	10	724	6	2,739		69	323		2
	Total.....	4,719	7,796	5,336	16,396	22,559	125,983	4,185	23,455	27,984	699	21,709
MIDDLE ASIA.												
83	Akmolin.....	1,045	579	1,716	1,216	2,615	15,994	1,347	4,224	1,638	3	1,111
84	Transkaspian.....	281	410	117	215	95	952	162	1,008	818		15
85	Samarkand.....	60	89	85	137	201	1,006		68	327		17
86	Semipalatinsk.....	120	122	291	404	342	2,622	116	878	469	2	502
87	Semirechinsk.....	145	113	82	814	902	6,725	4	717	749	1	1,575
88	Sir-Darinsk.....	317	220	324	140	658	3,615	34	428	351	7	223
89	Turkestan.....	488	677	2,277	413	1,058	5,373	378	3,022	1,633	8	1,953
90	Uralsk.....	617	67	195	201	551	1,926	130	270	274	24	223
91	Fergana.....	196	20	38	213	704	1,528	21	251	580	2	1,056
	Total.....	3,269	2,297	5,125	3,843	7,126	39,741	2,192	10,226	6,839	47	6,675
	Total for Russian Empire.....	143,790	416,767	461,722	382,612	533,791	3,024,207	180,724	501,000	373,406	8,702	344,006

RUSSIAN MORBIDITY REPORTS FOR THE YEAR 1909—Continued.

Governments and Provinces.	Ery- sipelas.	Septi- cemia and pyemia.	Acute articu- lar rheu- matism.	Scurvy.	Croup- ous pneu- monia.	Tuber- culosis.	Syphilis.	Soft chan- cre.	Gonor- rhea.	Malaria.	Scabies.	Tra- choma.	Miscellaneous.		Number of vacci- nations.		
													Noninfectious diseases.	Mental dis- eases.			
EUROPEAN RUSSIA.																	
1 Arkangel.....	644	425	17	1,464	1,363	900	976	2,026	184	1,239	953	16,892	461	31,177	431	20,459	
2 Astrakhan.....	896	898	73	2,534	1,924	1,011	2,036	4,982	1,187	2,961	57,034	10,613	729	21,499	872	56,349	
3 Bessarabia.....	3,197	2,349	203	18,244	119	5,278	13,436	9,488	1,187	9,112	75,985	37,154	13,961	116,208	2,995	147,312	
4 Vilna.....	3,739	800	82	2,062	289	4,655	3,975	1,923	369	2,178	7,855	50,907	10,828	22,787	1,797	71,757	
5 Vitebsk.....	1,248	1,275	242	10,126	254	7,494	9,757	16,023	722	2,400	2,596	39,693	10,591	55,046	1,663	45,136	
6 Vladimir.....	3,877	4,029	191	9,925	447	5,203	4,793	9,604	607	3,384	22,827	76,573	3,998	89,422	1,730	75,351	
7 Volodga.....	2,523	1,513	137	7,791	596	11,575	18,101	6,168	1,272	4,077	14,149	80,408	13,775	101,487	1,400	69,633	
8 Vologda.....	2,536	4,499	388	12,323	434	5,629	11,489	70,957	1,474	8,292	114,155	85,460	15,915	102,535	610	166,858	
9 Varonesch.....	6,332	5,109	300	12,241	776	16,821	15,326	21,401	1,518	7,889	48,086	420,720	51,276	151,828	3,719	155,242	
10 Viatka.....	6,857	1,206	227	14,140	507	5,896	6,810	2,325	1,545	1,939	7,318	10,094	2,371	21,501	424	121,823	
11 Grodno.....	6,880	1,206	227	3,877	220	2,094	8,486	23,283	4,677	17,001	128,067	29,291	5,413	125,708	1,059	112,093	
12 Don-Kossack district.....	6,443	4,949	607	21,157	432	4,066	7,230	12,996	2,643	9,920	143,197	64,915	17,735	273,114	2,676	131,749	
13 Ekatermoslov.....	11,190	7,347	303	21,062	296	7,200	10,335	13,588	1,589	5,104	81,432	172,021	34,609	86,699	3,750	102,922	
14 Kasan.....	3,450	2,799	256	9,748	153	5,131	11,564	13,588	1,589	5,104	81,432	172,021	34,609	86,699	3,750	102,922	
15 Kaluga.....	2,112	1,954	182	7,342	117	6,342	5,636	11,788	606	1,749	7,245	36,158	1,503	39,412	1,605	75,755	
16 Kief.....	6,576	7,974	787	25,151	455	13,105	27,995	22,151	4,540	13,957	30,258	48,293	18,900	144,010	2,421	180,692	
17 Kovno.....	8,779	1,410	210	11,114	351	4,779	8,570	1,293	604	2,239	30,258	48,293	18,900	144,010	2,421	180,692	
18 Kostroma.....	2,226	2,664	88	11,114	351	4,779	8,570	1,293	604	2,239	30,258	48,293	18,900	144,010	2,421	180,692	
19 Kurland.....	3,349	574	206	11,114	351	4,779	8,570	1,293	604	2,239	30,258	48,293	18,900	144,010	2,421	180,692	
20 Kurland.....	5,746	4,732	173	11,500	162	4,948	7,467	3,844	824	3,172	13,729	83,773	18,900	144,010	2,421	180,692	
21 Livland.....	1,300	1,457	532	3,539	124	4,293	10,438	8,424	3,824	3,340	85,213	142,000	18,465	76,116	1,027	9,046	
22 Minsk.....	2,414	2,223	400	10,286	281	15,310	13,082	5,605	3,829	3,340	85,213	142,000	18,465	76,116	1,027	9,046	
23 Mohilev.....	4,106	1,158	461	16,694	1,664	19,853	11,652	4,607	901	2,887	16,712	102,530	15,969	79,762	4,036	116,642	
24 Moscow.....	8,587	13,177	1,416	27,492	1,664	24,080	39,747	47,351	15,167	30,854	36,842	84,694	7,556	317,644	7,707	133,483	
25 Nijie Gorodsk.....	2,454	2,748	194	6,961	4,304	4,304	6,151	13,417	2,498	8,159	80,424	66,671	6,334	103,234	2,207	65,624	
26 Novgorodsk.....	1,948	1,878	194	6,961	4,304	4,304	6,151	13,417	2,498	8,159	80,424	66,671	6,334	103,234	2,207	65,624	
27 Olenetz.....	1,632	1,277	30	1,943	352	3,832	7,113	6,291	120	683	3,643	25,793	690	31,125	316	51,863	
28 Orenburg.....	1,252	1,084	235	2,928	700	2,320	2,609	5,851	120	2,579	39,457	24,077	4,935	45,819	465	68,836	
29 Orloff.....	3,852	3,497	259	10,527	240	6,085	9,219	28,059	738	3,223	52,593	160,045	3,654	66,372	1,368	127,592	
30 Pensa.....	2,852	2,852	244	10,860	847	3,655	6,103	62,059	321	2,233	34,647	55,304	9,849	46,859	1,041	80,638	
31 Perm.....	6,769	4,458	316	25,786	4,477	12,505	16,969	18,119	1,856	14,291	270,893	13,171	188,992	2,847	112,058	2,847	112,058
32 Podolsk.....	3,348	4,611	251	12,208	4,477	12,505	16,969	18,119	1,856	14,291	270,893	13,171	188,992	2,847	112,058	2,847	112,058
33 Poltava.....	12,014	10,609	340	34,122	312	13,185	24,966	14,398	1,861	5,123	126,163	159,604	47,278	129,019	2,593	157,975	

34	Pskor.....	3,072	1,724	144	5,406	95	4,454	5,365	15,430	1,019	2,032	1,151	71,777	16,434	57,139	761	46,656
35	Rjasan.....	3,252	3,831	323	7,499	168	7,105	8,334	32,409	1,535	2,804	27,770	66,919	35,179	57,918	1,387	175,430
36	Samara.....	7,512	4,440	418	17,483	611	13,475	11,009	56,928	1,937	7,776	237,960	66,919	35,179	91,721	1,797	129,176
37	St. Petersburg.....	6,959	6,917	794	22,735	2,890	13,475	33,082	34,504	21,989	30,252	3,197	41,283	18,082	178,877	8,293	120,823
38	Saratov.....	7,550	5,360	278	12,498	1,194	7,745	13,431	69,849	3,048	11,376	162,785	44,205	27,798	98,782	1,770	106,682
39	Smolensk.....	7,198	2,736	140	11,303	1,114	4,218	6,106	54,012	4,434	4,734	90,391	65,957	10,521	68,880	1,068	76,401
40	Simbirsk.....	2,464	2,150	523	5,735	734	7,772	14,981	33,365	773	3,735	3,939	106,318	10,984	11,995	1,774	153,395
41	Tatris.....	6,205	3,869	655	12,093	147	5,664	17,032	11,620	2,154	8,308	64,734	25,700	17,027	92,350	2,133	74,654
42	Tambow.....	7,919	5,887	376	16,353	485	10,059	12,384	94,152	1,670	7,010	123,085	106,263	4,209	88,571	2,379	152,803
43	Tver.....	2,827	3,964	433	6,620	1,215	9,785	13,574	19,293	1,076	2,501	3,316	73,927	13,684	48,475	2,769	213,858
44	Ufa.....	1,763	1,983	59	6,597	184	5,512	7,482	19,807	9,903	2,477	9,607	66,766	2,484	47,721	1,266	83,792
45	Ufa.....	1,302	1,817	462	28,819	284	7,780	14,321	20,750	2,167	3,935	56,030	245,804	13,706	71,974	1,766	98,472
46	Charkov.....	14,792	10,491	631	8,572	718	8,734	31,871	21,047	6,730	7,183	125,590	117,842	35,846	179,987	3,878	142,118
47	Cherson.....	8,422	8,572	631	16,301	718	8,734	31,871	21,047	6,730	7,183	125,590	117,842	35,846	179,987	3,878	142,118
48	Chernigov.....	11,244	7,078	308	20,493	695	9,197	14,902	13,970	7,721	4,555	77,635	184,003	24,159	114,992	2,395	146,968
49	Estland.....	7,850	5,533	48	1,107	14	1,107	2,370	1,602	527	2,021	77,635	184,003	24,159	114,992	2,395	146,968
50	Jaroslaw.....	2,214	2,784	1,396	7,513	922	4,815	10,232	11,282	1,626	3,844	7,237	19,337	3,414	62,607	1,613	51,557
	Total.....	219,963	183,604	17,095	584,112	30,197	367,649	569,912	1,055,983	103,812	313,384	2,359,759	3,889,698	731,215	4,565,572	101,664	4,951,919
POLISH PROVINCES.																	
51	Warsaw.....	1,516	1,864	838	7,515	186	5,220	13,392	13,674	4,230	16,885	3,451	14,540	10,980	42,330	2,818	81,227
52	Kalisch.....	1,09	253	117	1,147	28	1,147	1,224	13,410	102	525	3,707	1,900	1,489	3,550	3,136	88,664
53	Kelzka.....	255	274	186	759	28	2,969	2,081	601	186	480	1,057	2,001	524	5,395	238	36,856
54	Lomsehn.....	101	223	15	654	27	1,676	5,081	244	69	349	611	1,212	439	4,057	87	21,761
55	Lublin.....	487	578	187	1,362	79	2,939	5,593	889	326	1,035	952	2,318	932	7,689	536	39,952
56	Petrokov.....	1,409	643	2,363	5,126	102	5,126	5,923	6,046	2,116	6,245	2,264	5,412	1,052	38,518	864	50,026
57	Plotzka.....	1,150	518	74	1,277	15	1,796	2,556	3,338	133	456	1,267	8,282	5,592	4,699	127	29,087
58	Radom.....	318	386	138	641	.....	1,722	1,796	449	104	561	1,969	1,993	346	5,285	79	14,985
59	Suwalki.....	96	20	39	289	7	617	633	341	96	333	73	615	1,052	2,124	111	20,466
60	Siedletz.....	156	481	181	954	31	3,040	2,015	314	152	551	1,101	2,541	1,687	6,716	136	23,303
	Total.....	4,657	5,625	2,418	16,466	565	26,252	35,995	23,306	7,724	27,420	12,452	40,820	23,099	119,863	5,132	407,507
CAUCASUS.																	
61	Bakinsk.....	1,605	945	24	3,084	225	1,821	3,047	6,592	6,652	9,218	108,117	12,994	5,547	55,434	107	27,202
62	Batum.....	12	114	20	545	61	241	388	6,413	448	218	9,077	1,035	140	3,114	.....	7,247
63	Dagestan.....	214	350	6	2,173	99	416	660	2,016	301	777	38,084	12,578	788	9,875	19	21,228
64	Eleswetpol.....	710	494	27	5,980	105	1,016	1,359	2,417	267	1,448	35,596	12,578	1,280	18,684	219	14,001
65	Karsk.....	196	120	7	914	122	267	300	424	37	207	8,270	2,349	845	4,303	4	14,732
66	Kuban.....	4,749	3,913	500	25,958	1,525	6,184	4,358	6,095	2,693	5,530	310,290	36,336	16,473	121,239	235	140,669
67	Kutaisk.....	578	553	52	3,084	356	2,716	5,679	2,260	833	2,004	71,865	10,288	344	19,906	141	11,244
68	Stavropol.....	1,690	1,457	44	6,268	318	1,500	1,622	4,810	499	1,854	71,312	10,288	7,843	39,649	266	65,817
69	Tersk.....	1,044	1,055	142	6,091	572	1,912	2,090	2,361	978	2,395	74,670	8,803	1,611	27,201	20	43,967
70	Tiflis.....	1,345	1,024	204	1,776	218	2,793	4,487	4,259	2,222	5,992	23,119	9,148	1,757	25,055	344	33,980
71	Black Sea coast.....	585	248	15	576	16	574	678	774	351	703	67,657	6,320	8,994	13,746	10	6,191
72	Erivan.....	784	418	31	1,770	99	625	613	618	221	703	67,657	6,320	8,994	13,746	10	23,668
	Total.....	13,521	10,691	1,072	58,219	3,714	20,065	25,251	33,039	15,502	31,179	911,434	112,020	45,478	347,956	1,199	409,986

RUSSIAN MORBIDITY REPORTS FOR THE YEAR 1909—Continued.

Governments and Provinces.	Paro- titis.	Ery- sipelas.	Septi- cemia and pyemia.	Acute articu- lar rheu- matism.	Scurvy.	Croup- ous pneu- monia.	Tuber- culosis.	Syphilis.	Soft chan- cre.	Gonor- rhea.	Malaria.	Scabies.	Tra- choma.	Miscellaneous.			Number of vacci- nations.
														Noninfectious diseases.			
														Tran- smis- sible af- fections.	Mental dis- eases.		
SIBERIA.																	
73 Amur.....	401	276	14	871	560	492	442	1,095	297	1,026	2,635	3,484	451	11,438	168	5,211	
74 Ensel.....	1,108	540	56	4,265	340	2,182	2,044	5,392	908	2,776	15,631	18,384	5,692	31,069	400	42,492	
75 Zabaikal.....	590	413	73	3,494	1,119	1,559	4,666	3,578	588	3,537	6,866	5,351	3,949	22,111	243	33,300	
76 Irkutsk.....	1,022	981	62	3,878	703	3,346	4,204	8,273	2,924	6,475	6,485	12,471	3,223	50,972	533	37,500	
77 Kamaichka.....	18	15	.....	161	20	42	209	89	13	64	29	18	39	555	4	.....
78 Primor.....	701	525	35	3,135	846	1,240	1,384	3,857	809	2,966	4,001	6,057	1,400	24,147	184	24,001	
79 Sakhalin.....	13	32	.....	19	.....	12	43	98	14	59	129	127	3	750	7	.....
80 Tobolsk.....	848	819	16	7,652	582	3,088	3,872	8,907	724	3,677	7,428	41,160	5,233	58,497	451	58,670	
81 Tomsk.....	2,187	1,121	105	7,742	772	2,332	4,215	14,313	1,243	6,268	20,618	71,189	11,406	47,007	1,307	122,245	
82 Yakutsk.....	11	76	6	179	28	230	480	341	6	324	1,311	1,088	775	2,826	71	9,655	
Total.....	6,899	4,798	367	31,396	4,970	14,523	21,559	46,143	7,586	27,172	65,073	160,529	32,171	249,372	3,628	332,684	
MIDDLE ASIA.																	
83 Akmoln.....	861	549	59	4,922	508	1,470	2,182	8,056	916	3,630	14,534	33,396	4,313	22,470	253	38,873	
84 Transcaspien.....	677	232	16	1,300	175	306	702	1,984	857	1,558	20,151	1,532	2,358	14,990	81	48,250	
85 Samarkand.....	249	359	11	366	61	191	289	2,330	131	572	25,365	7,480	10	7,480	10	25,865	
86 Semipalatn.....	153	106	6	1,997	31	371	561	2,528	112	1,013	3,123	12,048	1,735	5,205	48	21,841	
87 Semirechin.....	696	356	10	1,090	246	652	382	4,207	139	1,353	32,634	6,501	1,598	14,065	75	51,491	
88 Sir-Darin.....	179	641	10	2,139	548	624	1,063	9,064	465	1,968	46,922	15,192	501	19,300	180	42,796	
89 Turkistan.....	507	308	14	1,587	514	654	901	3,316	87	977	19,638	10,976	1,113	8,472	15	39,468	
90 Uralak.....	203	171	18	686	176	194	500	3,008	214	1,114	7,929	1,020	246	4,278	.....	25,120	
91 Fergana.....	316	780	19	1,149	164	203	286	6,184	481	1,786	36,301	10,584	593	17,442	5	43,896	
Total.....	3,841	3,502	163	15,226	2,423	4,665	6,866	40,677	3,402	13,971	206,597	94,159	12,943	113,822	667	337,600	
Total for Russian Em- pire.....																	
248,881 208,220 21,115 705,429 41,869 433,154 659,583 1,199,148 138,026 413,126 3,555,315 4,297,226 844,906 5,396,585 112,290 6,439,696																	

MOVEMENTS OF INFECTED VESSELS.

Cholera.

BOSNIAN.—At Odessa, Russia, November 18, 1912, from London via Constantinople, 2 cases, with 1 death.

Plague.

BELLALISA.—At Hamburg, Germany, September 2 to 5, 1912, from Rosario July 2, via Cape Verde Islands, 2 cases in crew. River Tyne, September 28, 1912, from Hamburg, 1 case in crew.

Yellow Fever.

PUEBLA.—At Laguna del Carmen, Mexico, September 14, 1912, from Vera Cruz and other Mexican ports, 1 case on board.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX.

Reports Received During Week Ended Feb. 7, 1913.

CHOLERA.

Places.	Date.	Cases.	Deaths.	Remarks.
Dutch East Indies:				
Borneo.....	Oct. 9-26.....	4	3	
Singkawang.....	Oct. 8-Nov. 1.....	1	1	
Java—				
Madison.....	Oct. 6-Nov. 2.....	154	73	
Samarang.....	Oct. 18-Nov. 7.....	79	71	
Surabaya.....	Oct. 16-25.....	2	1	
Turkey in Asia:				
Adana—				
Adana.....	Nov. 24-Dec. 2.....		1	
Aleppo—				
Aleppo.....	.....do.....	3	3	
Alexandretta.....	.....do.....	3	2	
Angora—				
Angora.....	Nov. 24-Dec. 11.....	29	23	
Balikesir.....	Nov. 24-Dec. 2.....		1	
Beirut—				
Merdjioun.....	Dec. 3-11.....		15	
Tabariyeh.....	Dec. 13-22.....			Present.
Brusa.....	Nov. 24-Dec. 11.....	20	22	
Castamoni.....	Nov. 24-Dec. 2.....	4	4	
Hedjaz—				
Medina.....	Dec. 3-11.....		6	
Mekka.....	.....do.....		3,007	
Ismidt.....	Nov. 24-Dec. 2.....		1	
Sinope.....	Dec. 3-11.....	1	4	
Smyrna.....	Nov. 24-Dec. 2.....	1	1	
Tarsus.....	.....do.....	2	1	
Zanzibar.....	Dec. 15-21.....	16	16	Chwaka district, Dec. 2-15, 16 cases not previously reported.

YELLOW FEVER.

Brazil:				
Bahia.....	Jan. 24-Feb. 3.....	4	1	

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received During Week Ended Feb. 7, 1913—Continued.****PLAGUE.**

Places.	Date.	Cases.	Deaths.	Remarks.
Afghanistan:				
Tehehel-Bagdareh.....	Sept. 1-30.....			And vicinity 100 deaths daily. Present to Oct. 29.
Dutch East Indies:				
Java—				
Kediri.....	Nov. 3-16.....	30	30	
Madison.....	Oct. 27-Nov. 16.....	50	48	
Paserocean Residency.....	do.....	112	118	
Surabaya.....	do.....	7	7	
Egypt.....				Total Jan. 1-Dec. 31: Cases, 884; deaths, 441. Dec. 26-31: Cases, 9; deaths, 8.
Cairo.....	Dec. 30.....	1	1	
Port Said.....	Dec. 29.....	1	1	
Provinces—				
Menouf.....	Dec. 27-31.....	6	7	
Minieh.....	Dec. 27-29.....	1	1	
Philippine Islands:				
Manila.....	Nov. 24-Dec. 14.....	7	5	

SMALLPOX.

Canada:				
Montreal.....	Jan. 19-25.....	12		
Ottawa.....	Jan. 22-28.....	1		
Quebec.....	Jan. 19-25.....	1		
St. Johns.....	do.....	5		
Chile:				
Punta Arenas.....	Nov. 1-30.....	1		
Dutch East Indies:				
Java—				
Samarang.....	Oct. 4-24.....	57	23	
Egypt:				
Cairo.....	Dec. 17-31.....		2	
Port Said.....	do.....		1	
Suez.....	Dec. 28-Jan. 3.....	1	1	
France:				
Marseille.....	Dec. 1-31.....		1	
Nantes.....	Jan. 5-18.....	2		
Paris.....	do.....	10		
Germany:				
Hamburg.....	Jan. 10-16.....	1		
Gibraltar.....	Jan. 13-19.....	1		
India:				
Karachi.....	Dec. 15-21.....	1		
Mexico:				
Mexico.....	Dec. 22-Jan. 4.....	12	3	
Portugal:				
Lisbon.....	Jan. 5-11.....	4		
Russia:				
Moscow.....	Dec. 15-28.....	2	1	
St. Petersburg.....	Dec. 22-28.....	10	5	
Spain:				
Cadiz.....	Dec. 1-31.....		3	
Turkey in Asia:				
Beirut.....	Dec. 29-Jan. 4.....	15		
Turkey in Europe:				
Constantinople.....	Dec. 29-Jan. 11.....		26	

Reports Received from Dec. 27, 1912, to Jan. 31, 1913.**CHOLERA.**

Places.	Date.	Cases.	Deaths.	Remarks.
Bulgaria:				
Eski Saghra.....	Dec. 9.....	2		
Sofia.....	Nov. 21-Dec. 16.....	6	1	
China:				
Foochow.....	Nov. 20-Dec. 2.....			Isolated cases.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received from Dec. 27, 1912, to Jan. 31, 1913—Continued.****CHOLERA—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
Dutch East Indies:				
Borneo—				
Pontrank.....	Oct. 6.....	1		
Samarinda.....	Oct. 9.....	1		
Java—				
Batavia.....	Nov. 9-23.....	32	21	One case among Europeans.
Madioen.....	Sept. 15-Oct. 5.....	35	30	
Megalang.....	Oct. 7-12.....	9	6	
Paseroean Residency.....	Sept. 20-26.....	2	1	
Samarang.....	July 19-Oct. 17.....	436	352	
Sumatra—Jambi.....	Sept. 18-24.....	1		
India:				
Bombay.....	Nov. 17-Dec. 28.....	117	81	
Calcutta.....	Nov. 9-Dec. 14.....		172	
Cochin.....	Oct. 19-Nov. 9.....	6	6	
Madras.....	Nov. 24-Dec. 28.....	20	22	
Negapatam.....	Nov. 11-16.....	9	9	
Rangoon.....	Nov. 1-30.....	2	2	
Indo-China: Saigon.....	Aug. 20-Oct. 27.....	42	38	
Japan.....				Total July 10-Dec. 20: Cases, 2,715.
Alta Ken.....	Dec. 2.....	1		
Chiba Ken.....	Nov. 23-Dec. 17.....	25		
Fukushima Ken.....	Dec. 5.....	1		
Hiaro Islands.....	Sept. 15-Dec. 1.....	30		
Hioa Ken.....	Nov. 27-Dec. 19.....	22		
Hiroshima Ken.....	Nov. 23.....	1		
Ibaraki Ken.....	Dec. 6.....	2		
Iwate Ken.....	Dec. 16.....	1		
Kanagawa Ken.....				Total Nov. 23-Dec. 20: Cases, 53.
Yokohama.....	Nov. 24-Dec. 8.....	18		Sept. 25-Dec. 7: 9 cases from vessels.
Kochi Ken.....	Nov. 28-Dec. 4.....	3		
Minami Tokaki gun.....	Sept. 15-Dec. 2.....	40		
Nagasaki Ken.....				Nagasaki Ken and outlying is-
Nagasaki city.....	Sept. 15-Dec. 2.....	10	4	lands Sept. 15-Dec. 2: Cases
				188, deaths 134, including pre-
				vious reports.
Osaka Fu.....	Nov. 23-Dec. 3.....	14		
Saga Ken.....	do.....	5		
Sasebo.....	Sept. 15-Dec. 2.....	7		
Shidzuoka Ken.....	Dec. 3-20.....	8		
Taiwan (Formosa).....				Total Nov. 3-23: Cases, 48; deaths,
				42.
Tokushima Ken.....	Sept. 15-Dec. 1.....	65		Not previously reported.
Tokyo Fu.....	Nov. 23-Dec. 20.....	101		
Tokyo.....				Oct. 2-Dec. 7: Cases, 273; and in
Wakamatsu Ken.....	Nov. 26.....	1		vicinity, 342.
Russia: Odessa.....				Nov. 18-20: 1 case from s. s.
				Bosnian from Constantinople.
				Confined in the quarantine
				barracks.
Siam:				
Bangkok.....	Oct. 13-Dec. 7.....		4	
Straits Settlements—Singapore.....	Nov. 17-23.....	2	2	
Turkey in Asia.....				Total, Nov. 17-23: Cases, 160;
				deaths, 218.
Adana—Adana.....	Nov. 17-23.....	2	1	
Aleppo—Alexandretta.....	do.....	2	1	
Angora.....	do.....	24	24	
Brusa.....	do.....	6	16	
Castomoni.....	do.....	2		
Diarbekir.....	do.....	8	2	
Hedjaz—				
Jedda.....	Nov. 25-Dec. 14.....	395	393	Among returning pilgrims.
Mekka.....	Nov. 17-23.....	111	172	
Ismidt.....	do.....	3	1	
Mosul.....	do.....		1	
Smyrna.....	do.....	2		
Turkey in Europe:				
Constantinople.....	Dec. 3-Jan. 6.....	1,542	750	Total Nov. 6-Jan. 6: Cases 2,459,
				deaths 1,308.
Zanzibar.....	Nov. 8-Dec. 15.....	115	114	From Mwera, Chwaka, and Moko-
				toni. Chwaka district, Oct. 4—
				Dec. 28, 329 cases not included
				in previous reports.
At sea.....				Nov. 18-20, 1 fatal case on s. s.
				Bosnian, en route from Con-
				stantinople to Odessa.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received from Dec. 27, 1912, to Jan. 31, 1913—Continued.****YELLOW FEVER.**

Places.	Date.	Cases.	Deaths.	Remarks.
Ecuador:				
Bucay.....	Nov. 15-30.....	1	1	
Duran.....	Nov. 1-30.....	2	1	
Guayaquil.....	do.....	12	6	
Milagro.....	do.....	2	2	
Naranjito.....	do.....	1		
Senegal:				
Dakar.....	Dec. 7.....			Present.
Venezuela:				
Caracas.....	Nov. 1-30.....	7	1	In September 2 deaths and in October 1 death not previously reported. In December no case and no death.

PLAGUE.

Brazil:				
Pernambuco.....	Nov. 16-30.....		2	
Rio de Janeiro.....	Nov. 3-Jan. 2.....	9	4	
British East Africa:				
Kiambu.....	Nov. 16-Oct. 21.....	2		
Kisumu.....	do.....	6		
Mombasa.....	Oct. 1-31.....	12	12	Free Nov. 18.
Nairobi.....	Nov. 16-Dec. 8.....	2	1	
Chile: Taltal.....	Oct. 22-28.....	3		
China:				
Amoy.....	Jan. 16.....			Present.
Manchuria.....	Dec. 14.....			Present along the railway, between Harbin and Chang-Chun.
Shanghai.....	Nov. 18-Dec. 15.....		2	Dec. 18, present in vicinity of the French settlement.
Dutch East Indies:				
Java—				
Kediri.....	Oct. 6-26.....	75	73	
Madison.....	do.....	16	16	
Paseroean Residency.....	do.....	132	129	
Surabaya.....	do.....	3	3	
Ecuador:				
Duran.....	Nov. 1-30.....	3	1	
Guayaquil.....	do.....	138	52	
Egypt.....				Total Nov. 23-Dec. 25: Cases, 22; deaths, 7. Jan. 1-Dec. 25: Cases, 875; deaths, 433.
Behera.....	Nov. 22-Dec. 19.....	2	1	
Charkieh.....	Nov. 29-Dec. 12.....	3	2	
Garbieh.....	Nov. 23-Dec. 17.....	3		
Girgeh.....	Dec. 21-25.....	1	1	
Menouf.....	Oct. 1-Dec. 21.....	7		
Minieh.....	Nov. 28-Dec. 26.....	6	3	
India:				
Bombay.....	Nov. 17-Dec. 28.....	31	28	
Calcutta.....	Nov. 9-Dec. 14.....		29	
Karachi.....	Nov. 19-23.....	2	2	
Rangoon.....	Oct. 1-Nov. 30.....	68	68	
Provinces.....				Total Oct. 27-Nov. 30 Cases, 12,333; deaths, 9,908.
Delhi.....	Oct. 27-Nov. 30.....	31	14	
Bombay.....	do.....	4,475	3,356	
Madras.....	do.....	733	520	
Bengal.....	do.....	30	30	
Bihar and Orissa.....	do.....	473	367	
United Provinces.....	do.....	2,270	1,857	
Punjab.....	do.....	495	371	
Burma.....	do.....	34	34	
Central Provinces.....	do.....	242	193	
Mysore.....	do.....	975	701	
Hyderabad.....	do.....	613	523	
Central India.....	do.....	57	47	
Rajputana.....	do.....	1,905	1,895	
Indo-China: Saigon.....	Aug. 20-Oct. 27.....	55	35	
Mauritius.....	Oct. 11-Nov. 7.....	96	60	
Morocco: Rabat.....	Nov. 1.....	3		Among the military.
New Caledonia: Numea.....	Oct. 29.....	2		Sept. 17-Oct. 17, 8 cases, with 5 deaths.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received from Dec. 27, 1912, to Jan. 31, 1913—Continued.****PLAGUE—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
Peru:				
Departments—				
Arequipa—				
Mollendo.....	Nov. 17-Dec. 7....	7	4	
Callao—				
Callao.....	Sept. 1-7.....			Present.
Lambayeque.....	do.....			Do.
Philippine Islands:				
Manila.....	Nov. 10-16.....	5	4	
Russia:				
Transbaikal district—				
Verneudinsk.....	Oct. 18-28.....	3	3	Near Nerchinsk.
Trans-Caspian Ty. Merv...	Dec. 9-21.....	29	29	Pneumonic.

SMALLPOX.

Abyssinia: Adis Ababa.....	Nov. 24-Dec. 21....			Present.
Algeria:				
Departments—				
Algiers.....	Oct. 1-31.....	11		
Constantine.....	do.....	11		
Oran.....	do.....	118		
Austria-Hungary:				
Galicia.....	Nov. 10-Dec. 7....	3		
Trieste.....	Dec. 8-21.....	4		
Brazil:				
Para.....	do.....	2		
Pernambuco.....	Nov. 1-30.....		65	
Rio de Janeiro.....	Nov. 3-Jan. 2.....	17	5	
British East Africa: Mombasa...	Dec. 1-21.....	5		
Canada:				
Ontario—				
Ottawa.....	Jan. 4-18.....	13		
Toronto.....	Dec. 1-21.....	5		
Quebec—				
Montreal.....	Dec. 15-Jan. 18....	30		
Quebec.....	do.....	20		
St. Johns.....	Jan. 12-18.....	4		
Chile: Punta Arenas.....	Oct. 31.....	2		Oct. 31, 1 case in vicinity.
China:				
Amoy.....	Jan. 16.....			Present.
Chungking.....	Nov. 3-16.....			Do.
Hongkong.....	Nov. 24-Dec. 14....	4	2	
Nanking.....	Dec. 7.....			Do.
Shanghai.....	Nov. 18-Dec. 22....	13	53	Deaths among natives.
Tientsin.....	Nov. 17-Dec. 14....		2	
Dutch East Indies:				
Java—				
Batavia.....	Nov. 9-Dec. 7....	14	1	
Egypt:				
Alexandria.....	Dec. 9-31.....	2		
Cairo.....	Nov. 12-Dec. 16....	7	1	
Port Said.....	Dec. 3-9.....	1		
France:				
Marseille.....	Nov. 1-30.....		1	
Paris.....	Dec. 1-Jan. 4.....	7		
Germany.....				Total: Nov. 24-30, 5 cases not included in report, page 2231, vol. xxvii; Dec. 1-Jan. 11, 15 cases.
Gibraltar.....	Dec. 9-15.....	1		
Great Britain: Liverpool.....	Jan. 1-4.....	1		
India:				
Bombay.....	Nov. 17-Dec. 28....	11	4	
Calcutta.....	Dec. 1-14.....		11	
Karachi.....	Dec. 1-7.....	1		
Madras.....	Dec. 1-28.....	4	3	
Rangoon.....	Oct. 1-Nov. 30.....	11	3	
Indo-China: Saigon.....	Aug. 20-Oct. 20....	2	2	
Italy: Palermo.....	Dec. 15-21.....	2		
Japan.....				Total Jan. 1-Oct. 31: Cases 13, with 1 death.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received from Dec. 27, 1912, to Jan. 31, 1913—Continued.****SMALLPOX—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
Mexico:				
Aguascalientes.....	Dec. 9-Jan. 12.....	.....	4	
Chihuahua.....	Dec. 9-Jan. 5.....	.....	2	
Durango.....	Dec. 1-31.....	.....	15	
Mazatlan.....	Jan. 1-7.....	2	.....
Mexico.....	Nov. 17-Dec. 7.....	26	12	
Salina Cruz.....	Nov. 17-23.....	1	.....
San Luis Potosi.....	Sept. 15-21.....	1	.....
Netherlands: Rotterdam.....	Dec. 22-28.....	.....	1	
Peru:				
Callao.....	Sept. 1-14.....	.....	.....	Present.
Lima.....	.....do.....	.....	.....	Do.
Mollendo.....	Nov. 24-Dec. 7.....	5	1	
Salaverry.....	Dec. 4-11.....	1	.....
Portugal: Lisbon.....	Dec. 1-28.....	21	.....
Roumania.....	.....	.....	.....	Total Oct. 1-31: Cases
Russia:				
Libau.....	Dec. 16-Jan. 4.....	2	.....
Moscow.....	Dec. 8-14.....	1	1	
Odessa.....	Nov. 17-Dec. 14.....	3	.....
St. Petersburg.....	Nov. 24-Dec. 21.....	86	5	
Warsaw.....	Sept. 22-Oct. 5.....	5	.....
Servia: Belgrade.....	Dec. 22-28.....	2	.....
Siam: Bangkok.....	Nov. 10-Dec. 7.....	.....	3	
Siberia: Vladivostok.....	Oct. 28-Dec. 28.....	4	3	
Spain:				
Almeria.....	Dec. 1-31.....	.....	40	
Barcelona.....	Dec. 1-28.....	.....	64	
Cadiz.....	Nov. 1-30.....	.....	4	
Madrid.....	Nov. 1-Dec. 31.....	.....	34	
Seville.....	Dec. 1-31.....	.....	27	
Valencia.....	Nov. 14-Jan. 4.....	28	.....
Straits Settlements: Singapore.....	Nov. 24-30.....	1	1	
Sweden: Stockholm.....	Oct. 8-21.....	3	.....
Switzerland:				
Cantons—				
Aargau.....	Dec. 15-21.....	1	.....
Basel.....	Nov. 14-Dec. 21.....	8	.....
Grisons.....	Dec. 1-28.....	9	.....
Turkey in Asia: Beirut.....	Dec. 8-14.....	1	2	
Turkey in Europe: Constantinople.....	Dec. 1-28.....	.....	43	
Zanzibar.....	Nov. 8-14.....	.....	1	

SANITARY LEGISLATION.

STATE LAWS AND REGULATIONS PERTAINING TO PUBLIC HEALTH.

IOWA.

Communicable Diseases—Quarantine and Disinfection (Regulations State Board of Health Adopted July 21, 1911).

CHAPTER I.

QUARANTINE REGULATIONS.

RULE I. The following diseases are subject to quarantine: Scarlet fever (including scarletina and scarlet rash), diphtheria (including membranous croup), smallpox, epidemic cerebrospinal meningitis, anterior poliomyelitis, cholera, leprosy, and bubonic plague.

RULE II. Quarantine shall be established by serving a written notice signed by the mayor of the city or town, or the clerk of the township, upon the head of the family or occupants of the premises and by posting in a conspicuous place upon each building, hall, lodging room, or place wherein exists or is suspected to exist a communicable disease, the following described sign: A yellow card not less than 12 inches square, having printed thereon in large letters the word "Quarantine," followed by the name of the disease and the words: "Notice! No person shall be permitted to enter or leave these premises except as provided by the rules and regulations of the State board of health." (Signed) ———, Mayor or Township Clerk.

RULE III. All cases of diseases listed in Rule I shall be immediately reported to the mayor of the city or town, or clerk of the township, by the physician, if any be in attendance, otherwise by the householder of the premises wherein such disease exists.

In every case a written notice shall also be sent within 24 hours to the mayor of the city or town or to the township clerk.

RULE IV. SECTION 1. It shall be the duty of the mayor or township clerk, upon receiving notice of the existence of any case of scarlet fever (including scarletina or scarlet rash), diphtheria (including membranous croup), smallpox, epidemic cerebrospinal meningitis, anterior poliomyelitis, cholera, leprosy, or bubonic plague, to forthwith quarantine the premises as provided for in rule 2 of this chapter, and to take such other measures as may be necessary and proper for the restriction and suppression of such disease.

SEC. 2. It shall be the duty of the mayor of every city or town and the clerk of every township to report to the secretary of the State board of health, within 24 hours after being notified thereof, every case of quarantinable disease reported to him; and upon receiving notice of the subsidence of such disease to likewise immediately report that fact, together with the mode of termination, whether by death or recovery. All reports provided for in this regulation shall be made upon postal cards in accordance with the following forms adopted by the State board of health.

February 7, 1913

280

REPORT OF QUARANTINABLE DISEASES.

DEPARTMENT OF PUBLIC HEALTH.

County.....

Date.....19...

To the SECRETARY, STATE BOARD OF HEALTH:

The following cases of quarantinable diseases were reported to this office to-day:

For quarantine.	Number.	Total for month to date.	For quarantine.	Number.	Total for month to date.
Scarlet Fever.....			Leprosy.....		
Diphtheria.....			Bubonic plague.....		
Smallpox.....					
Cerebrospinal meningitis.....					
Anterior poliomyelitis.....					
Cholera.....					
Total.....			Total.....		

M. D.

Health Officer.

Mayor-Clerk.

City or township of.....

TERMINATION OF QUARANTINE.

DEPARTMENT OF PUBLIC HEALTH.

County.....

Date.....19...

To the SECRETARY, STATE BOARD OF HEALTH:

The following cases of infectious diseases, previously reported to you from this office, have terminated as follows:

	Recovery.	Deaths.
Scarlet fever.....		
Diphtheria.....		
Smallpox.....		
Cerebrospinal meningitis.....		
Anterior poliomyelitis.....		
Cholera.....		
Leprosy.....		
Bubonic plague.....		
Total.....		

The premises infected by these diseases have been properly disinfected and released.

Mayor-Clerk.

M. D.

Health Officer.

City or township.....

Local boards of health must furnish the foregoing cards and comply with Rule IV, section 2.

Sec. 3. The mayor of each city or town, and the clerk of each township shall designate and detail certain peace officers as sanitary police.

Sec. 4. Sanitary police officers shall visit all quarantined premises within their jurisdiction at least once in every 24 hours to see that quarantine is properly observed, and shall make daily report thereof to the mayor or clerk of the township.

RULE V. If any person shall willfully or maliciously, or without written authority remove or deface or cause to be removed or defaced any quarantine sign or signal of danger, officially posted upon the quarantined premises, as provided by the regulations of the State board of health, he shall be deemed to have violated the regulations of the State board of health, and shall be prosecuted accordingly.

RULE VI.—Section 1. Upon the termination of any of the diseases named in Rule I, the attending physician or health officer shall report the fact in writing to the mayor or township clerk, who shall order the infected persons and infected premises, together with all persons, furniture, bedding, clothing and all other articles therein contained, to be disinfected according to the regulations of the State board of health and under the direction of the local board of health, which shall direct the attending physician to superintend or perform the work. In case there be no attending physician, or in case the attending physician refuses to perform the work or fails to perform it according to the regulations of the State board of health, it shall be the duty of the local board of health to provide some other suitable person to perform such work.

Sec. 2. Any undertaker or person in charge of the funeral of any person, dying from tuberculosis, shall within 48 hours after the death of such person report to the mayor of the city or town, or to the township clerk, the name and residence of the deceased person, together with the cause of death. Upon receipt of the notice as herein provided, the mayor of the city or town or clerk of the township shall cause said premises to be disinfected in accordance with the regulations of the State board of health, and the law as enacted by the thirty-fourth general assembly.

Sec. 3. All bills and expenses incurred in carrying out the rules and regulations of the State board of health, and for all fumigating and disinfecting, must be provided for according to chapter 156, acts of the thirty-third general assembly and as amended by the thirty-fourth general assembly.

RULE VII. Whenever any premises are quarantined, special attention must be given to all pet animals kept thereon. Cats and dogs shall be excluded from the house and prevented from running at large. Before the quarantine is raised all such animals shall be thoroughly washed in a disinfecting solution. Special precautions must be taken to destroy all mice and rats. When flies are present, all doors and windows shall be securely screened and fresh fly paper placed in each room daily.

RULE VIII. Quarantine shall be released only upon order of the mayor or township clerk after receipt of a written report from the attending physician or health officer stating that the disease has terminated and that the premises and all infected persons have been properly disinfected in strict accordance with Rule VI, Chapter I. This report shall state the number of persons on the premises, the number who have suffered from the disease, their names, ages, when the disease appeared in each case, and how it terminated.

When all regulations pertaining to quarantine and disinfection have been complied with the quarantine shall be released.

RULE IX. No letters or other articles coming from quarantined premises shall under any circumstances be placed in any post office, letter box, or rural delivery. If on account of carelessness or neglect any such infected article shall have been placed in a post office, letter box, or rural delivery, all such letters or articles, together with such other articles as have come in contact therewith, shall be detained and immediately disinfected by the health officer, without unnecessary delay or removal from the custody of the postmaster. This rule is in accordance with the United States postal laws.

RULE X. No person except the attending physician shall be permitted to enter or leave any premises while the same are under quarantine, except as specifically

provided for by the regulations of the State board of health and in strict accordance therewith. The secretary or members of the State board of health may enter any premises under quarantine whenever, in their opinion, it is necessary for purposes of investigation or to enforce the regulations of the State board of health.

CHAPTER II.

SPECIAL REGULATIONS.

RULE I. Scarlet fever.—**SECTION 1.** Quarantine shall be maintained in scarlet fever until the complete recovery of the patient, including complete desquamation, and this shall be certified to in writing by the attending physician or health officer.

SEC. 2. In case the disease terminates either by death or recovery, quarantine may be released unless there are other children on the premises who have not had the disease, in which case the quarantine shall be maintained for 10 days after the date of death or recovery.

SEC. 3. Quarantine shall not be released in any case until the infected persons and infected premises have been properly disinfected according to Rule VI, Chapter I.

RULE II. Diphtheria.—**Section 1.** The period of quarantine for diphtheria shall be determined by release cultures whenever possible, and the following rules shall be rigidly observed:

1. Each culture for release shall be taken by the attending physician from both nose and throat of the patient.

2. No culture for release shall be taken until 5 days after the disappearance of all membrane or inflammation of the nose or throat.

3. Second and subsequent cultures shall not be taken within 24 hours of the preceding culture.

4. All examinations of cultures for release shall be made by a bacteriologist appointed by the director of the State bacteriological laboratory.

5. Quarantine shall not be released until two consecutive negative cultures are reported by the bacteriologist to the mayor or township clerk.

6. The local health officer may in any case take cultures and send them to the bacteriological laboratory for verification.

Sec. 2. In case the culture method for release is not used, quarantine shall be maintained for 28 days from the beginning of the last case on the premises, provided, however, that antitoxin was administered within the first 24 hours from the initial symptoms and the patient has made a complete recovery, and these facts are certified to in writing by the attending physician or health officer.

Sec. 3. If the disease terminates by death, quarantine may be released unless there are other children on the premises, in which case quarantine must be maintained for 10 days longer. In case the surviving children have been recently protected by immunizing doses of antitoxin and one negative culture has been made from the nose and throat of each, in accordance with the rules for release cultures, the quarantine may be released immediately.

Sec. 4. Quarantine shall not be released in any case until the infected persons and infected premises have been properly disinfected according to Rule VI, Chapter I.

RULE III. Smallpox.—**Section 1.** Quarantine shall be maintained in smallpox until the complete recovery of the patient and until after complete desquamation, as certified to in writing by the attending physician or health officer.

Sec. 2. In case of the termination of the disease by death, quarantine may be released unless there are persons on the premises who are unprotected from smallpox, either by vaccination or having previously had smallpox, in which case the quarantine shall be continued for 14 days longer.

SEC. 3. Any person who has been vaccinated within three years, or who has had smallpox, may be released from quarantine upon proper disinfection of his person and clothing.

SEC. 4. Quarantine shall not be released in any case until the infected persons and infected premises have been properly disinfected according to Rule VI, Chapter I.

RULE IV.—*Vaccination*.—SECTION 1. Vaccination for smallpox is the introduction by scarification of the bovine vaccine virus through the skin.

SEC. 2. In addition the Iowa courts have held that the administration by mouth of a proper preparation of variolinum constitutes a legal method of vaccination.

RULE V.—*Meningitis*.—SECTION 1. In case of epidemic cerebrospinal meningitis, quarantine shall be maintained until the recovery of the patient from the acute symptoms, and this shall be certified to in writing by the attending physician or health officer.

SEC. 2. In case the disease terminates by death, quarantine may be released after 10 days from date of death.

SEC. 3. Quarantine shall not be released in any case until the infected persons and infected premises have been properly disinfected according to Rule VI, Chapter I.

RULE VI.—*Infantile paralysis*.—SECTION 1. Quarantine shall be maintained in anterior poliomyelitis (infantile paralysis or epidemic motor paralysis) for a period of 21 days from the beginning of the disease.

SEC. 2. Disinfection of urine, feces, throat, and nasal discharges shall be required in accordance with chapter 3 of the rules and regulations for disinfection.

SEC. 3. When the disease terminates either by death or recovery, quarantine may be released unless there are other persons on the premises who have not had the disease, in which case the quarantine shall be maintained for 10 days after the date of death or recovery.

SEC. 4. Quarantine shall not be released in any case until the infected persons and infected premises have been properly disinfected according to Rule VI, Chapter I.

RULE VII. The breadwinner of the family quarantined for scarlet fever, diphtheria, smallpox, or anterior poliomyelitis may be permitted to pursue his usual avocation in the discretion of the local board of health, but no person from the infected premises shall be permitted to attend any public gathering or school in any capacity or to travel upon any public conveyance. To obtain permission from the local board of health to leave the premises, the breadwinner shall agree not to enter the sick room, and he shall change his clothing upon leaving and entering the infected house, and shall wash his face and hands in a disinfecting solution.

RULE VIII.—*Cholera*.—SECTION 1. Quarantine shall be maintained in case of cholera until the complete recovery of the infected person, and this shall be certified to in writing by the attending physician or health officer.

SEC. 2. In case the disease terminates by death, quarantine shall be maintained for 14 days from date of death.

SEC. 3. Quarantine shall not be released in any case until the infected persons and infected premises have been properly disinfected according to Rule VI, Chapter I.

RULE IX.—*Leprosy*.—SECTION 1. All persons affected with leprosy shall be continuously confined upon their home premises. It shall be the duty of the health officer of the local board of health to report to the secretary of the State board of health the name, age, social condition, and residence of all persons affected with this disease within the community over which he has jurisdiction, and the local board shall keep a record of the particulars required herein.

RULE X.—*Bubonic plague*.—SECTION 1. Quarantine shall be maintained in bubonic plague until complete recovery of the infected person or persons.

SEC. 2. In case the disease terminates by death, quarantine shall be maintained for 14 days from date of death.

SEC. 3. Quarantine shall not be released in any case until the infected persons and infected premises have been properly disinfected according to Rule VI, Chapter I. In addition all pet animals and, in so far as possible, all rats and mice shall be destroyed.

RULE XI. *Dairy products.*—SECTION 1. The sale of milk or dairy products from any quarantined premises is prohibited.

SEC. 2. However, if the dairy and barns are situated a safe distance from the quarantined dwelling, and if no person, utensil, or water from the infected premises comes in contact with such dairy products, the local board of health shall satisfy themselves of these facts and then may allow the said products to leave the premises.

SEC. 3. But such products as have been exposed to infection shall not be sold or allowed to leave the premises.

RULE XII. *Release of healthy persons from quarantine.*—Any adult living on premises under quarantine or any child who has previously had the disease for which the quarantine has been established may be released from quarantine, after proper disinfection, by written order of the local board of health, but persons so released shall not reenter the premises until the quarantine is released. (In quarantine for smallpox, no unvaccinated person shall be released before the end of the quarantine period.)

RULE XIII. All persons suffering from any disease subject to quarantine or residing upon premises infected with any such disease, shall be excluded from the public schools. The superintendent, teacher, or other official in charge of any school shall be held personally responsible for the enforcement of this regulation, and under no circumstances shall such superintendent, teacher, or official allow any person so excluded to reenter such school, except upon the presentation of a written permit, showing that such person has been properly disinfected and regularly released from quarantine. All such permits must be signed by the mayor or township clerk, and by the health officer of the local board of health. This regulation shall also apply to academies, seminaries, and colleges.

RULE XIV. Section 1. No person suffering from tuberculosis shall be permitted to attend any public or private school as a pupil, neither shall any such person be employed in any school in any capacity.

Sec. 2. Whenever any person shall have reason to believe that this rule is being violated he shall so inform the mayor or township clerk, and it shall then be the duty of the local board of health to investigate the case and exclude said pupil or employee from school unless the board is fully satisfied that said pupil or employee is not tubercular.

Sec. 3. The local board of health shall cause the health officer to procure from the suspected individual a sample of sputum or other discharge and shall forward this to the State bacteriological laboratory for examination, and shall use such other means as are usual and customary to determine the presence or absence of tuberculosis.

Sec. 4. All examinations made by or for the local board of health shall be free of expense to the patient.

MUNICIPAL ORDINANCES, RULES, AND REGULATIONS PERTAINING TO PUBLIC HEALTH.

ALEXANDRIA, VA.

Health Officer, Deputy Health Officer, and Board of Health—Duties of. (Ordinance adopted July 23, 1912.)

SECTION 1. There shall be in September, 1912, and every two years thereafter, elected by the city council, a health officer, whose term of office shall begin the first day of the following October and who shall be a practicing physician. He shall inspect the city twice a month from April to September, and once a month for the balance of the year, visiting all localities suspected of being unhealthy or exposed to disease. He shall suggest to the board of health such measures as he shall think fit to preserve the health of the city and especially to prevent the introduction and spread of infectious and contagious diseases, and to prevent or regulate the pursuit of callings prejudicial to the public health or comfort. He shall also consider and report upon all such matters as may be referred to him by the board of health, and make monthly reports to the said board of health of his proceedings. He shall receive for his services as such health officer the sum of \$600 per annum, payable in monthly installments on warrants drawn by the auditor, which shall be in lieu of all fees, including fees as registrar of vital statistics.

SEC. 2. The health officer, immediately after his election, or in the interim between the passage of this ordinance and his election, shall appoint a deputy to be known as deputy health officer, who is hereby vested with police authority in the performance of his duties. The duties of the deputy health officer shall be to inspect dairies, live stock, milk, slaughterhouses, meat, fish, fowls, and such other articles of food as the board of health may direct. He is hereby authorized to apply the tuberculin test to live stock in accordance with State and Federal regulations, and shall receive a fee from owners of said stock of not over 50 cents per head, the collection of said fee being permissible in connection with his salary, hereinafter provided, this, however, being applicable only to cases where tests are made to determine the quality of the milk or condition of herd upon owner's application on form prescribed and provided by the board of health. The board of health is hereby authorized to accept the certificate of any properly licensed veterinarian as to the condition of dairies, herd, and cattle when approved by the health officer.

SEC. 3. The deputy health officer shall be a qualified veterinarian, and the health officer shall ascertain to his positive knowledge that the applicant for office of deputy is qualified to perform the duties herein prescribed and submit the name of the appointee to the city council, which shall, as soon as consistent, confirm or nonconfirm the appointment.

SEC. 4. The deputy health officer, in addition to his other duties, shall attend horses of the fire department and all other horses the property of the city, and perform all veterinarian duties in connection therewith and shall receive for his services the sum of \$400 per year, payable in monthly installments on warrant drawn by the auditor, which shall be in lieu of all fees excepting those hereinbefore described.

SEC. 5. The deputy health officer shall report his findings and recommendations to the health officer, who shall be governed accordingly.

SEC. 6. The board of health is hereby empowered to designate an acting deputy health officer when circumstances may warrant, said designation to be effective for a reasonable time or within the judgment of the city council.

SEC. 7. The health officer is hereby vested with police authority in the performance of his duties. He shall require deleterious matter, wherever found, to be removed by the occupant of the premises or by the owner if the premises are unoccupied, and con-

veyed beyond the limits of the city. He may require yards and premises and the street gutters in front of any premises, when he thinks it important to the health of the neighborhood, to be cleaned and limed by the occupant or owner of such premises. Any person failing, after one day's notice, to obey the orders of the health officer, given pursuant to the provisions of this section, shall be fined not less than \$1 nor more than \$20, unless it appears that such person was unable to comply with the orders of the health officer, and each day's violation shall be deemed a separate offense.

SEC. 8. Whenever in the opinion of the board of health it shall be necessary for the public health, to clean, ditch, or lime any particular locality, public alley, or street areas, or to ditch, clean, or lime any common drain across private lots or in alleys, the use of and right of way over which is for the benefit of the real estate abutting thereon, or to remove or abate any nuisance the owner or causer of which can not be apprehended, said board of health may, through the health officer, instruct the city engineer to have the same done.

The city engineer shall report the cost of such work by pay roll on voucher to the auditor as work done by order of the board of health on streets, private lots, or alleys, or nuisances, as the case may be, and the auditor is hereby authorized to issue warrants for payment of same from such appropriations as may be made under section 2, of Chapter XIX of the Code of 1874, as hereinafter amended and reenacted.

SEC. 9. There shall be elected at the same time and in the same manner as the health officer, a physician to the poor, at the salary of \$300 per annum, payable in monthly installments, upon warrants drawn by the auditor, who shall attend the indigent sick of the city and sick of the almshouse, and who shall perform all the duties of the present physicians to the poor.

SEC. 10. It shall be the duty of the members of the police force to take note of and report any and all infractions of the health laws and, where called upon by the health officer, the deputy health officer, or the board of health, to assist in enforcing the same.

BELLEVUE, OHIO.

Garbage—Care and Disposal of. (Regulation Board of Health Adopted March 21, 1912.)

SECTION 1. It shall be the duty of every resident householder, tenant, hotel keeper, boarding-house keeper, retail dealer, and all parties or persons occupying dwellings within the city of Bellevue, Ohio, to provide or cause to be provided, and at all times to keep or cause to be kept or provided, portable vessels or tanks for holding garbage and offal; said vessels or tanks to be perfectly water-tight, and so kept with handles on the outside and provided with a tightly fitting cover, which cover shall not be removed except when absolutely necessary. Said vessels or tanks shall be kept or placed in the rear of the house or in basement areas or passageways most accessible to be collected, and never upon the street, alley, sidewalk, or other public place, and shall be of a capacity of not more than 2 bushels. All such vessels or tanks shall be promptly delivered to the collector when called for, and shall be returned by him to said place or places without unnecessary delay; and no person except for such purpose authorized shall in any manner interfere with said vessels or tanks or the contents thereof.

SEC. 2. The words garbage and offal as used in this ordinance shall be held to include every refuse accumulation of animal, fruit or vegetable matter, or otherwise that attends the preparation, use, cooking, dealing in, or storage of meats and fowls, fruits, or vegetables; and it shall be unlawful for any person to place in said vessels or tanks any ashes, refuse, water, waste, or other material whatsoever.

CHELSEA, MASS.**Domestic Animals—Not To Be Kept Without License. (Rule, Board of Health, Adopted Oct. 29, 1912.)**

RULE 86 A. No person shall allow to be kept in any building, or on the premises of which he may be the owner, lessee, tenant, or occupant, any cow or cows, horses, hens, or swine without a license being granted for same by the board of health.

LOS ANGELES, CAL.**Midwifery—Practice of. (Ordinance No. 2503, Adopted May 7, 1912.)**

SEC. 1. It shall be unlawful for any person to practice midwifery or obstetrics or to act as accoucheur, or to attend or assist or advise at the birth of any child, without first applying for and receiving a permit in writing so to do from the health commissioner.

Any person desiring such a permit shall make and file with the health department of the city of Los Angeles an application therefor in writing. The name, age, sex, residence, place of business, and occupation of the applicant shall be stated in such application and the previous experience of the applicant shall be stated fully therein. The applicant shall state in such application where he or she shall have resided for a period of five years next preceding the date of filing such application. Such application shall be signed by the applicant and shall be sworn to before an officer authorized to administer oaths.

Nothing herein contained shall be construed to require any person to obtain a permit under the provisions of this ordinance if such person has, prior to the adoption of this ordinance, obtained a permit under the provisions of ordinance No. 20606 (new series), and such permit has not been revoked, and a new permit is not specifically required to be obtained under the provisions of this ordinance.

SEC. 2. The health commissioner shall make an investigation as to the experience and history of each person applying for such a permit, and if it shall be found that any such person has committed any criminal or immoral act, or has been guilty of any crime or of any criminal or immoral practice, the application of such person shall be denied by the said health commissioner.

If the said health commissioner shall not find that such applicant has committed any criminal or immoral act, or has been guilty of any crime or of any criminal or immoral practice, then the said health commissioner shall make a careful and thorough examination of the qualifications possessed by such applicant to practice midwifery or obstetrics, or to act as accoucheur, or to attend or assist or advise at the birth of children. Such examination may be written or oral, or both, in the discretion of the health commissioner.

SEC. 3. If the said health commissioner shall determine that such application should be granted, a permit, in writing, shall be issued to the person applying therefor.

SEC. 4. If the holder of any such permit shall commit any criminal or immoral act, or shall be guilty of any crime or of any criminal or immoral practice, the health commissioner shall revoke the permit of such person.

SEC. 5. No such permit shall be revoked until a hearing shall have been had by the health commissioner, notice of which hearing shall be given in writing and served at least three days prior to the date of hearing upon the holder of such permit. Such notice shall state the ground of complaint against the holder of such permit and shall also state the time when and place where such hearing will be had. Such notice shall be served upon the holder of such permit by delivering the same to such person, or to any person of suitable age and discretion in charge of or employed in the place of business of such person; or if such person has no place of business, then at his or her place of residence; or by leaving such notice at the place of residence of such person, with

some person of suitable age and discretion. If the holder of such permit can not be found and service of such notice can not be made upon him or her in the manner herein provided, then a copy of such notice shall be mailed, postage fully prepaid, addressed to such holder of such permit at such place of business or residence at least three days prior to the date of such hearing.

SEC. 6. The provisions of this ordinance shall not apply to any physician licensed as such by the State of California in the manner required by law or to any person assisting at the birth of any child under the direction and in the presence of a physician so licensed.

SEC. 7. Each person filing an application for a permit pursuant to the provisions of this ordinance shall deposit the sum of \$5 with the health department at the time of filing such application. If such application is granted, the said sum shall be retained by the city. If the application is not granted, one-half of such sum shall be returned to the applicant, and the remainder shall be retained by the city for the purpose of reimbursing the city for the expense of making the investigation required by this ordinance and the holding of the examination, if an examination is held.

SEC. 8. Each such permit shall expire at the end of one year from and after the date thereof, unless sooner revoked. Such permit may be renewed by the health commissioner from year to year, without examination, upon the payment of a fee of \$1. Each such renewal shall expire at the end of one year from and after the date thereof, unless sooner revoked.

SEC. 9. All moneys received pursuant to the provisions of this ordinance shall be at once deposited in the city treasury, and all moneys returned to any applicant shall be upon a demand or demands filed, approved, and audited in the same manner as other demands against the city are filed, approved, and audited.

SEC. 10. That any person violating any of the provisions of this ordinance shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punishable by a fine of not less than \$5 nor more than \$500, or by imprisonment in the city jail for a period of not more than six months, or by both such fine and imprisonment.

SEC. 11. That ordinance No. 20606 (new series), approved July 19, 1910, be, and the same is hereby, repealed: *Provided*, That any such repeal shall not affect or prevent the prosecution and punishment of any person, firm, or corporation for any act done or permitted in violation of any ordinance which may be repealed by this ordinance, and shall not affect any prosecution or action which may be pending in any court for the violation of any ordinance repealed by this ordinance.

ADDITIONAL COPIES of this publication
may be procured from the SUPERINTEND-
ENT OF DOCUMENTS, Government Printing
Office, Washington, D. C., at 5 cents per copy
Subscription price, per year - - - - \$2

